P R GOVT COLLEGE (A), KAKINADA

DEPARTMENT OF HORTICULTURE

ACTIVITY REPORT

FIELD TRIP TO ARAKU, VISHAKAPATNAM STUDY OF FLORA DATE: 05-01-2022

CONEVENOR SARA PALAPARTHY

STAFF MEMBERS

Dr.M.KRISHNA RAO

P.NICEE

I.ANI

P.RAJESWARI

PARTICIPANTS:

5 member's faculty and 60 student members are participated.

OBJECTIVES:

- To observe flora of Araku
- To study about the pepper and coffee plantation
- To study about processing of coffee
- To study about the Hilly region vegetation and rare plants located at those places.
- To visit coffee processing plantation and honey making unit apiculture institute and Medicinal plantation located at Araku.
- To visit Galikonda area and observed many bryophytes like marchantia, polytrichulum etc.,
- To observe ferns and Gymnosperms like Gnetum etc.
- To observe dye yielding plants, wood yielding plants, especially pinus plantation, pepper plantation, coffee plantation etc.,
- To visit medicinal garden in and around Araku

Identified Plants

- Three major forest types in the study area were moist mixed deciduoud, dry savannah and scrub forest.
- The bases of hills were more vegetated than the tops.
- Some of the tree species recorded in the moist deciduous forest were :
- *Buchanania , Artocarpus lakoocha Roxb., Mangifera indica L.,Phyllanthus*
- *Coffee arabica L., Piper attenatum Buch. – Ham.ex Miq*. Plantations interspersed with silver oak etc.,

OUTCOMES:

- Observed flora of Araku
- Studied about the pepper and coffee plantation
- studied about processing of coffee
- studied about the Hilly region vegetation and rare plants located at those places.
- Visited coffee processing plantation and honey making unit apiculture institute and Medicinal plantation located at Araku.
- Visited Galikonda area and observed many bryophytes like marchantia, polytrichulum etc.,
- Observed ferns and Gymnosperms like Gnetum etc.
- Observed dye yielding plants, wood yielding plants, especially pinus plantation, pepper plantation, coffee plantation etc.,
- Visited medicinal garden in and around Araku

GALLERY:

Araku Plantation

***Pellia* Bryophyte**

Horticulture Garden

Identification of different plant Species

Study of Medicinal garden at Horticulture Department

Study of Honey Production Unit at Araku

P R GOVT COLLEGE (A), KAKINADA

DEPARTMENT OF HORTICULTURE

WASTE TO BEST ACTIVITY PROGRAMME

ACTIVITY REPORT

DATE: 21/02/2022 NADEP COMPOSTING

THEME:

NADEP method of making miracle compost was first invented by a farmer named Narayan Deotao Pandharipande (also popularly known as "Nadepkaka") living in Maharashtra (India). NADEP method uses a permanently built tank of mud or clay bricks, or cement blockettes. This is good where moisture is limiting, and is the best way to make compost after the rains have finished and during the dry season.

INTRODUCTION:

Composting began a comeback toward end of the last century with interest surging in recent years as economic and environmental factors have begun to change the way the world looks at crop production, environmental concerns chemical agriculture raises, and waste society generates. Compost is a way of returning safe, easily mineralised, organic matter, or humus, to the soil. Even though organic matter is a relatively small fraction of soil content, it can have a dynamic influence on the health of the soil as a whole. Compost is organic matter that has been broken down through the action of aerobic microbes and the heat they produce then subsequently built up into humus. Art and science of making compost for use as fertilizer has been around for centuries. Midwest Bio-Systems has combined this art with today's science, specialized equipment and proprietary methodology that together produce compost that can help solve many of world's agricultural and waste management problems.

This method becomes quite popular among the farmers in western India. In dryland conditions, organic manures play a great role as they not only supply balanced nutrients but also retain substantial amount of moisture. Traditionally, farmers used to apply farmyard manures to crops grown under rainfed condition. No scientific procedures are followed for preparing the manure and as a result the quality of the manure used to be very poor. Slowly over a period of time farmers have lost interest in farmyard manure and mainly depending on chemical fertilizers, which further deteriorated the soil health, infiltration and water holding capacities compost can be prepared from wide range of organic materials including dead plant material such as crop residues, weeds, forest litter and kitchen waste. Compost making is an efficient way of converting all kinds biomass into high value fertilizer that serves as a good alternative to farmyard manure, especially for crop growing households without livestock. Selecting and Preparing the Site for NADEP Tank NADEP method uses a permanently built tank of mud or clay bricks, or cement blockettes. It is, therefore, important to choose the permanent site for the tank with care. This is good anytime of the year where moisture is limiting, and is the best way to make compost after the rains have finished and during the dry season.

NADEP METHOD OF COMPOSTING

This method becomes quite popular among the farmers in western India. In dryland conditions, organic manures play a great role as they not only supply balanced nutrients but also retain substantial amount of moisture. Traditionally, farmers used to apply farmyard manures to crops grown under rainfed condition. No scientific procedures are followed for preparing the manure and as a result the quality of the manure used to be very poor. Slowly over a period of time farmers have lost interest in farmyard manure and mainly depending on chemical fertilizers, which further deteriorated the soil health, infiltration and water holding capacities compost can be prepared from wide range of organic materials including dead plant material such as crop residues, weeds, forest litter and kitchen waste. Compost making is an efficient way of converting all kinds biomass into high value fertilizer that serves as a good alternative to farmyard manure, especially for crop-growing households without livestock.

SELECTING AND PREPARING THE SITE FOR NADEP TANK

- NADEP method uses a permanently built tank of mud or clay bricks, or cement blockettes. It is, therefore, important to choose the permanent site for the tank with care. This is good anytime of the year where moisture is limiting, and is the best way to make compost after the rains have finished and during the dry season.
- Prepare and dig the pit, or better still, a series of three pits, when land is moist and easier to dig, and/or when there is a gap between other farming activities.
- If possible, make compost immediately at the end of the rainy season while there are plenty of green and moist plant materials.
- In the dry season, make the pit near a place where water can be added, e.g. next to the home compound where waste water and urine can be thrown on the compost materials, or near a water point, e.g. a pond, or near a stream where animals come to drink.
- Mark place of the pit with a ring of stones or a small fence so people and animals do not fall into it accidentally.

BENEFITS

- Reduced cash expenses on chemical fertilizer, improved soil fertility, increased crop yield.
- Supports organic crop production, reduced dependence on outside inputs.
- From each NADEP tank approximately 2.5 tons of compost is prepared within 90-120 days.
- The use of compost reduced the need for mineral fertilizer thus reducing production costs and outside dependence.

SIGNIFICANCE OF THE NADEP TANK

- NADEP method uses a permanently built tank of mud or clay bricks, or cement blockettes.
- This is good where moisture is limiting, and is the best way to make compost after the rains have finished and during the dry season
- Students of botany department had actively participated in composting programme which is indeeded useful as organic fertilizer to our garden medicinal plants.

GALLERY:

Collection of dry leaves and pit filling

NADEP COMPOST PREPARATION FROM DRY LEAVES

P R GOVT COLLEGE (A), KAKINADA

DEPARTMENT OF HORTICULTURE

BEST PRACTICES

ACTIVITY REPORT

PLANT OF THE DAY

25-02-2022 To TILL DATE

THEME:

OBJECTIVES: To know about the medicinal plant and understand the importance of medicinal plants among the students and teaching faculty.

- To display local Medicinal plants in front of the Botany department to ensure medicinal properties of plants.
- Each student has to participate in presentation of medicinal plants collecting plants from their localities.
- Students may aware with the applications of medicinal values and their importance.
- Student will Identify the medicinal plants of PRGC flora.
- Students may prepare the herbarium of locally availed medicinal plants.
- Students may know the significance of medicinal plants to cure many human diseases
- Details of students participated

S.No.	Groups Participated	Year	Medium	Male Students	Female Students	Total
1	BZC – Botany, Zoology, Chemistry, HBC – Horticulture, Botany, Chemistry ,MBC – Microbiology, Botany, Chemistry	Ist & IInd	EM& TM			

S.NO	NAME OF THE MEDICINAL PLANT	NAME OF THE STUDENT	SECTION
1	***Ocimum sanctum***	Y.S.S.Malleswari	III BSC BZC
2	***Azadirachta indica***	K.Jyothi bhagya	III BSC BZC
3	***Mentha spicata***	K.Ramalakshmi	III BSC BZC
4	***Annona squamosa***	K.sai kiran reddy	III BSC BZC
5	***Santalum album***	K.Ramalakshmi	III BSC BZC
6	***Coleus amboinicus***	S. Raju	III BSC BZC
7	***Aloe vera***	K. Veeralakshmi	III BSC MBC
8	***Eclipta prostrata***	C. Swathika	III BSC HBC
9	***Bryophyllum pinnatum***	S. Ramani	III BSC HBC
10	***Costus spicatus***	G. Showshitha	III BSC HBC
11	***Aegle marmelous***	CH. Charan	III BSC HBC
12	***Cymobopogan citrus***	G. Harsha	III BSC HBC
13	***Trachyspermum ammi***	K. Param jyothi	III BSC BZC
14	***Withania sominifera***	D. Vasundhra	III BSC BZC
15	***Syzygium cumini***	E. L. Sunandha	III BSC HBC

SIGNIFICANCE OF MEDICINAL PLANTS:

ALOE VERA:

- Aloe vera is medicinal plant that's been used to treat various health conditions for thousands of years.
- Aloe vera can be used in the form of creams, gels, and ointments.These products can be applied tropically to treat various conditions.

LEMON GRASS:

- Lemon grass contain substances that are taught to relieve pain and swelling, reduce fever, improve levels of sugar and cholesterol in blood.
- It has anti-oxidant properties stimulates the uterus and menstrual

OUTCOMES

- Each student had actively participated in presentation of medicinal plants collecting plants from their localities.
- Students awared with the applications of medicinal values and their importance.
- Identified the medicinal plants of PRGC flora.
- Students prepared the herbarium of locally availed medicinal plants.
- Students are known the significance of medicinal plants to cure many human diseases
- Awared with the identification and preparation of herbal medicines by using locally available plants.

P R GOVT COLLEGE (A), KAKINADA

DEPARTMENT OF HORTICULTURE

ACTIVITY REPORT FOR NATIONAL SCIENCE DAY 28-02-2022

Theme: Integrated approach in science and technology for sustainable future.

Objectives:

- To enhance the innovative skill in students
- To elevate the creativity in biological science
- To develop divergent thinking in all students
- To develop divergent thinking in all students
- To develop practical knowledge in all students

Department of botany and horticulture organized ‘national science day’ on 28-02-2022, in LAB-1 &2 of botany students exhibits, posters are displayed in Botany lab 1 & 2. Botany PROJECTS like photosynthesis, natural scrubbers, natural colours, organic cosmetics, representation of stomata etc. Horticulture projects like Grafting techniques, types of seeds, vertical garden, nursery layout etc. posters and 35 exhibits are displaced. Approximately 73 students are participated.

CONEVENOR

SARA PALAPARTHY

STAFF MEMBERS

Capt.Dr. M. KRISHNA RAO

P. NICEE

P. RAJESH

I.ANI

N. NAVYA

P. RAJESWARI

P.R GOVT. COLLEGE (A), KAKINADA

DEPARTMENT OF HORTICULTURE

TOTAL PROJECTS DISPLAYED :

Participants:

S.No	Name of the Project	Names of the Students	Class
1	Natural cosmetics	D.Harshitha P.jyothi Meghana	III BZC (E.M)
2	Hydroponics	O.Durga prasad R.Veeresh	III BZC (E.M)
3	Rock garden	Ch.sri sai charan G.Harsha Vardhan	IIIH BC
4	Pomology, Nutritional Values of fruits for flawless skin	M.Sai Jyothi	IIIH BC
5	Irrigation	V.Roshini T.Sai krishna	II MBC
6	Layouts of Nursery	M.J.D.Navy a G.Sajani	II HBC
7	Ridges and forrows method	Harishini Malleswari	II HBC
8	Food production in India	G.Mounika P.Srivalli	II BZC (EM)
9	Stomata	M. Asha K. Sowjanya	II BZC (EM)
10	Plant cell	.Jyothi	II BZC (EM)
11	Stellar evolution	K.Manoj	II BZC (EM)
12	Seed germination	K.Jayalakshmi P.Varalakshmi M.Anusha	II BZC (T.M)
13	Pollination	P. Anusha V.Radha B.Ramanamma	II BZC (T.M)
14	Waste water management	A. Jagadeswari P.Durga mohan	III B.VOC HORTI
15	Types of gardens	Lakshmi durga Mahalakshmi	III B.VOC HORTI
16	History of	B.Akhila B.Suchi Priya	II BOVC HORTI
17	Green house and types	K.Aravindh R.Santhosh	II BVOC HORTI
18	Coconut shells	J.Komali K.Bhavya	II BVOC HORTI
19	Medicinal plant and uses	K.James A.Rarmu	II BVOC HORTI
20	Seeds presentation	M.Bramarambika	II BVOC HORTI
21	Drip irrigation	P.Nissi	I HBC

		E.V.V.Vennela	
22	Hydrolysis	R.Triveni S.Surya mallika	I HBC
23	Photosynthesis	N. Praveena R.Keerthi	I HBC
24	Solar heat irrigation system	K.Neelima Y.Teja Maneesha	I HBC
25	Life cycle of plant	M.Rajini B.Pujitha	I HBC
26	Organic farming	Suresh	II HBC
27	Organic farming and chemical forming	P.Sandya devi	I B VOC HORTI
28	Grafting methods	K.Ratnam raju D.Srinivas	I B.VOC HORTI
29	Natural scrubbers	M.Siri M.Prathyusha	I B. VOC HORT
30	Pounding with flowers	A.Honey G.Chittithalli	I B. VOC HORTI
31	Soil erosion	T.Parimala Grace K.Janay	I B. VOC HORT
32	Chromatography	A.Yamini Devi U.Bhavana	I B. VOC HORTI
33	Divisions of Horticulture	P. Bunny K.Kalyani	I B. VOC HORTI
34	Types of irrigation	L.Raja Naresh G.Sowmya	I BZC (E.M) I SEM
35	Leaf spectrum	I.Harshitha	I BZC (E.M) I SEM
36	Types of soil	G.Bhavani	I BZC (E.M) I SEM

P R GOVT. COLLEGE (A) KAKINADA

National Science Day - 2022

DEPARTMENT OF HORTICULTURE

TOTAL PROJECTS DISPLAYED :

S.No	Name of the Project	Names of the Students	Class
1	Drip -Irrigation	P.Nissi E.v.v.vennela	I HBC I SEM
2	Hydrolysis	R. Triveni S.Surya mallika	I HBC I SEM
3	Photosynthesis	N. Praveena R.Keerthi	I HBC ISEM
4	Grafting methods	K.Ratnam raju D.Srinivas	I B.VOC HORTI I SEM
5	Natural scrubbers	M.Siri M.Prathyusha	I B.VOC HORTI

			I SEM
6	Pounding with flowers	A.Honey G.Chittithall i	I B,VOC HORTI I SEM
7	Soil erosion	T.Parimala Grace K.Janay	I B.VOC HORTI I SEM
8	Layouts of Nursery	M.J.D.Navya G.Sajani	II HBC II SEM
9	Ridges and forrows method	Harishini Malleswari	II HBC III SEM
10	Green house and types	K.Aravindh R.Santhosh	II B.VOC HORTI II SEM
11	Coconut shells	J.Komali K.Bhavya	II B.VOC HORTI III SEM
12	Medicinal plant and uses	K.James A.Rarmu	II B.VOC HORTI III SEM
13	Food production in India	.Mounika P.Srivalli	II BZC(EM) III SEM
14	Rock garden	Ch.sri sai charan G.Harsha vardhan	IIIH BC VI SEM
15	Waste water management	A.Jagadeswari P.Durga mohan	III B.VOC HORTI VI SEM
16	Natural cosemtics	D.Harshitha P.jyothi meghana	III BZC (E.M) VI SEM
17	Hydroponics	O.Durga prasad R.Veeresh	III BZC (E.M) VI SEM
18	Seed germination	K.Jayalakshmi P.Varalakshmi M.Anusha	II BZC (T.M) II SEM
19	Types of irrigation	L.Raja Naresh G.Sowmya	I BZC (E.M) I SEM
20	Leaf spectrum	I.Harshitha	I BZC (E.M) I SEM

P R GOVT. COLLEGE (A) KAKINADA

National Science Day - 2022

DEPARTMENT OF HORTICULTURE

S.No	Name of the Project	NAME OF THE STUDENT and Class I PLACE	NAME OF THE STUDENT and Class II PLACE	NAME OF THE STUDENT and Class III PLACE
1	Rock Garden	Ch.Sri sai charan,G.Harsha vardan		

2	Waste water management		A.Jagadheeswari P. Durga mohan	
3	Pomology, Nutritional values of fruits for flawless skin			M. Sai jyothi
4	Green house and types	K. Arvanidh R. Santhosh		
5	Layouts of Nursery		M.J.D.Navya G.Sajini	
6	Coconut shells			J.Komali K.Bhavya
7	Grafting methods	K.Rathnam raju D.Srinivas		
8	Organic farming and chemical forming		P.Sandhya devi	
9	Drip -Irrigation			P.Nissi E.V.V.Vennela
10	Natural cosemtics	D.Harshitha P.jyothi meghana		
11	Natural scrubbers		M.Siri M.Prathyusha	
12	Food production in India			G.Mounika P.Srivalli
13	Types of irrigation		L.Raja Naresh G.Sowmya	
14	Seed germination			K.Jayalakshmi P.Varalakshmi
15	Leaf spectrum	I.Harshitha		
16	Hydroponics		P.Hari krishna R.Veeresh	
17	Pollination			P.Anusha V.Radha

Chief Guest for National science Day – PROF. D.L. SASTRY, KAKINADA Delivered speech on" **Integrated approach in science and technology for sustainable future"** and motivate all students towards observation and ration thinking.

Convenor Dr.K.Jyothi Lecturer in charge of Physics given the report of National science Day.

Outcomes:

- Students enhanced with innovative skills.
- creativity in biology in elevated in all students. Students are enhanced with hands on practice
- students are developed divergent thinking
- practical knowledge is developed in all students

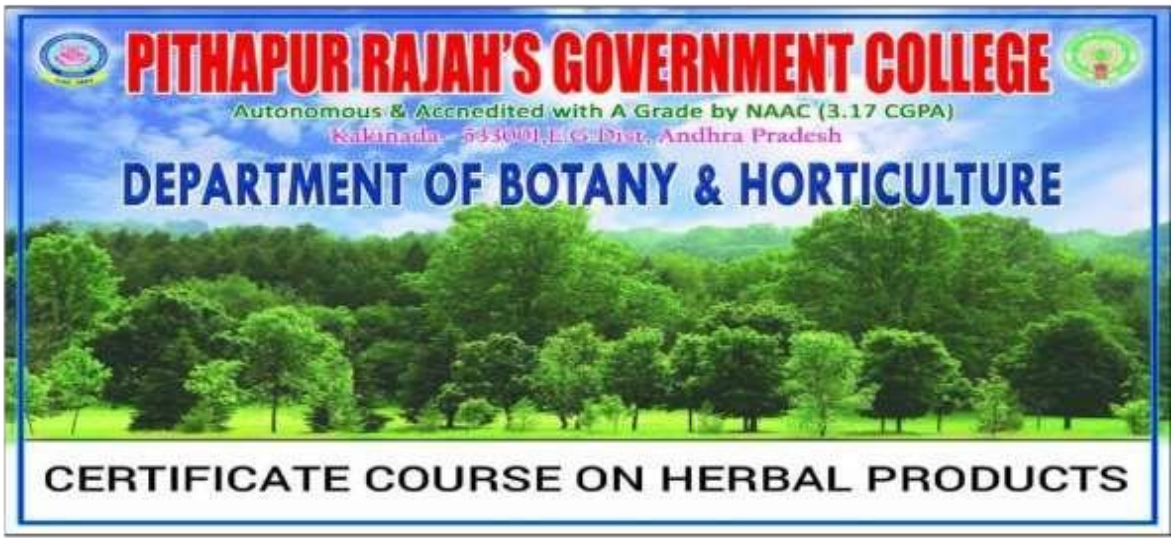
P.R GOVT. COLLEGE (A), KAKINADA

DEPARTMENT OF BOTANY AND HORTICULTURE

ACTIVITY REPORT

DATE : 08-04-2022

CERTIFICATE COURSE ON HERBAL PRODUCTS



CONEVENOR

SARA PALAPARTHY

STAFF MEMBERS:

P.RAJESH

P.NICEE

I.ANI

N.NAVYA

P.RAJESWARI

G.CHANIDINI

OPP. MC DA

DEPARTMENT OF BOTANY AND HORTICULTURE

CERTIFICATE COURSE ON HERBAL PRODUCTS

DATE

TIME

VENUE : LCD HALL – II

Theme

- Preparation of Triphala Churna,
- Prepanation of Bringarai Thail

ONLINE LINK

RESOURCE PERSON

IRAJA B.A.M.S., MBA

Medical Officer
Government Ayurvedic Dispensary
Dept. of AYUSH
Viravada, Pithapuram mandal,
Dist

Dx 34.N

CHAIRPERSON

Dr.B.V.?I@IJ&AXYA **M** M.Sc, Ph.D

PRINCIP

CONVENOR
SARA PALAPARTHY
M.Sc,B.Ed.(Ph.D)
LECTURER INCHARGE

CO-CONVENOR
Dr.Ch.JOHN SAMUEL
M.Sc, Ph.D
LECTURER IN BOTANY

ORGANIZING SECRETARY
Capt.Dr.M.KRISHNA RAO
M.Sc,M.Ed,M.Phil,Ph.D
LECTURER IN BOTANY

ORGANIZING COMMITTEE
P.NICEE, P.RAJESH, I.ANNI, N.NAVYA, P.RAJESWARI, G.MISHPA KUMARI , G.CHANDINI, M.PRABHU RAJ

For more details Contact us on :
9550808269,9542441222

Introduction

Bhringraj oil and hair growth are almost synonymous in Ayurveda. Bhringaraj for hair is considered as the ultimate herb and Bhringaraj hair oil is one of the widely used hair oils to promote hair growth, improve hair quality, and relieve split hairs, grey hairs, and more. All parts of the plant are used in the making of this oil.

Bhringraj (Eclipta Prostrata or Eclipta Alba) is a famous herb known for its multiple benefits and usage in hair growth. It is also an effective medicine for skin diseases, liver disorders, cough, asthma, eye disorders, and diseases related to any part of the head Bhringraj is known for its affinity with the hair often goes by the Sanskrit name

"Keshraj", literally known as the king of hair. It is used as a fresh extract in making **pure Bhringaraj oil** which improves hair growth, prevents hair fall, and treats premature greying of hair. It also improves the glow and complexion of the skin and prevents several skin diseases. It is considered an eye tonic, known to improve eyesight as well. Bhringraj is also known as **False Daisy** in English

S.NO	GROUPS PARTICIPATED	YEAR	MEDIUM	MALE STUDENTS	FEMALE SUDENTS	TOTAL
1	BZC- (BOTANY, ZOOLOGY, CHEMISTRY) HBC- (HORTICULTURE, BOTANY, CHEMISTRY) MBC- MICROBIOLOGY, BOTANY, CHEMISTRY)	III	English and Telugu	25	35	60

Making of The Bhringraj Oil:

In Ayurveda, there is an in-depth description of the formula of the oil. In the preparation, the oil is made in three parts.

Part One: A "Kashayam" or a decoction of various hair-benefitting herbs is made. All the herbs are soaked and then the potent mixture is extracted, which is later added in the Bhringaraj Hair oil.

Part Two: Various cold-pressed oils of coconut and sesame along with goat milk are mixed and the application of samskara of "Murchana" is done to acquire better potency of the oil. The oil acts as a base and is the main part of the making of this oil. While cooking, we must ensure to not burn the Bhringaraj oil as it will leave a very strong smell and spoil the herbs infused in it.

Part Three: Finally, a bolus of all the freshly extracted herbs and plants including Bhringraj, Amla, Fenugreek, Haritaki, Yashtimadhu, etc. are added in the Bhringaraj Hair oil and cooked on a slow fire for several hours till the result is achieved.

The resulting pure Bhringaraj oil is a wonderful elixir of potent Ayurvedic herbs, which works best in tackling hair concerns as well as giving a multitude of benefits.

Bhringaraj Oil Benefits:

Promoting Hair Growth

Bhringraj plays a pivotal role in treating and preventing baldness and is discussed under almost all **hair care tips**. When used suitably and consistently, it effectively increases blood circulation in the scalp and hair follicles, which in turn enriches the roots by bringing in more nutrients through the blood supply and promoting hair growth. Cold-pressed sesame oil deeply nourishes the hair while Ayurveda vouches that regular use of Bhringraj oil promotes the healthy re-growth of hair.

Prevention of Hair Dandruff

Dandruff is the most common concern nowadays that usually occurs due to an excessively dry scalp, humidity in the air, lack of hygiene, and even faulty dietary habits owing to an unhealthy lifestyle. It eventually leads to itchy and flaky skin on the scalp thereby causing excessive dandruff. Bhringraj oil benefits not only as a powerful anti-microbial and anti- bacterial properties but also has a high specific gravity due to the potent combination of various coldpressed oils in it, allowing the oil to penetrate deep inside the scalp and treat a dry scalp and itchiness.

Bhringraj oil has gained popularity as a one-stop solution for **natural hair care** & hair fall. There are many commercially available oils in the market, which promote various benefits. However, choosing an authentic formulation makes all the difference in maintaining the health of your hair.

The Forest Essentials formulates the best Bhringraj oil which is made from an ancient recipe documented in the Vedas. It effectively reduces Vata and Kapha doshas, cools the scalp and reduces the stress levels, which are primarily the most predominant causes of hair fall.

PREVENT DRYNESS OF SCALP:

It provides nourishment to hair follicles, increases blood circulation in the scalp, **prevents dryness of the scalp** and hence reduces hair fall. It is important to tackle the underlying issue and treat it with the correct combination of a suitable regime to address the concern a consequent hair fall

TRIPHALA CHURNA:

Ayurveda, a Sanskrit word meaning the knowledge of life or the science of perfect health, is the traditional system of personalized medicine from India, which emphasizes disease prevention and health promo tion. *Triphala* (Sanskrit; tri = three and phala = fruits) is a well-recognized and revered polyherbal medicine consisting of dried fruits of the three plant species *Emblica officinalis* (Family Euphorbiaceae), *Terminalia bellerica* (Family Combretaceae), and *Terminalia chebula* (Family Combretaceae) that are native to the Indian subcontinent. It is classified as a *tridoshic rasayana* in Ayurvedic medicine as it promotes longevity and rejuvenation in patients of all constitutions and ages. The formula consists of

the fruits *Amalaki* or the Indian Gooseberry, *Bibhitaki*, and *Haritaki* of the three plants generally in equal proportions and has been used in traditional medicine in India for over 1000 years according to the writings of the great physician Charak in a foundational text of Ayurveda called the *Charaka Samhita* as well as in another key text called the *Sushruta Samhita*. According to Charak, taking the *Triphala Rasayana* (*Triphala* with honey and ghee) daily has the potential to make a person live for one hundred years devoid of old age and diseases.[1] The physician Sushrut indicated that the formula is useful for treating ulcers and wounds.

SIGNIFICANCE:

Ayurvedic medicine uses *Triphala* as a pillar of gastrointestinal treatment; however, the complexity of the three *rasayanas*, or rejuvenate herbs, in the formulation allows for many applications. Moreover, studies have validated a number of potential uses of *Triphala*, which include free radical scavenging, antioxidant, anti-inflammatory, immunomodulating, appetite stimulation, gastric hyperacidity reduction, dental carries prevention, antipyretic, analgesic, antibacterial, antimutagenic, wound healing, anticariogenic, antistress, adaptogenic, hypoglycaemic, anticancer, hepatoprotective, chemoprotective, radio protective, and chemo preventive effects. *Triphala* may also promote proper digestion and absorption of food, reduce serum cholesterol levels, improve circulation, relax bile ducts, prevent immunosenescence, maintain homeostasis of the endocrine system, and increase production of red blood cells and haemoglobin.

FELICITATION PROGRAM:

Madam was felicitated for her work “CERTIFICATE PROGRAM “for preparation of herbal products. Vice principal Narasimham garu P.SARA, HOD of Botany Department and all the faculty and the students of botany and horticulture , had participated in this programme.

GALLERY:


DEPARTMENT OF BOTANY & HORTICULTURE
Kakinada
Andhra Pradesh
India
2022-04-08(Fri) 11:43(AM)
33°C
91°F
EXIT


EXIT
EXIT


Pithapuram Rajeh College Rd, Rama Rao Peta, Kakinada, Andhra Pradesh 533001, India
Kakinada
Andhra Pradesh
India
2022-04-08(Fri) 02:25(PM)
35°C
95°F
Google


GPS Map Camera
Kakinada, Andhra Pradesh, India
Collectorate Compound, X66G+7PP, Rama Rao Peta, Kakinada, Andhra Pradesh 533001, India
Lat 16.960628°
Long 82.227146°
06/05/22 02:44 PM
Google

P.R GOVT. COLLEGE (A), KAKINADA

DEPARTMENT OF HORTICULTURE

BEST PRACTICES

ACTIVITY REPORT

ORGANIC FARMING

DATE :18-04-2022

THEME:

Our Horticulture department conducted a program on 18/o4/2022 in the name of organic farming.

OBJECTIVES:

- Organic farming aims to produce superior quality products, with high nutritional value and no chemicals, with the purpose of good health.
- To produce food of high nutritional quality in sufficient quantity.
- It create a sustainable system that conserves energy, soil and water, while at the same time providing general maintainance of the environment.
- Organic agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible.
- To maintain and increase long term fertility of soil.
- To maintain the genetic diversity of agricultural system and its surroundings, including the plants and wild life habitats.
- Our Botany and Horticulture department conduct organic farming program on 18/04/2022. In the program our horticulture students sold some green leafy vegetables to all the P.R.G.C faculty.
- Under organic farming program our students had cultivated Roselle(Hibiscus sabdariffa), Luffa acutangula, Mint, Amaranthus,etc..,
- Our stuents had used only organic fertilizers like FYM(farm yard manure) and fermented cow urine (jeevamrutham) as Manures.

Leafy Vegetable Cultivation:

Students and staff arranged stall for leafy vegetables

Leafy vegetables are sold in PRGC Campus

OUTCOMES:

- Reduces exposure to harmful chemicals organic farming in principle discourages the use of harsh chemicals and therefore, contributes towards the preservation of the natural environment.
- Consumes less energy – Avoiding fertilizers contributes to a greater cause of energy conservation. This is because manufacturing synthetic fertilizers consumes a significant amount of energy.
- Reduces nitrogen run – off induced pollution.
- The nitro release negatively impacts biodiversity and pollutes the water bodies.
- Organic farming does not lead to such nitrogen run – off due to lack of depenance on synthetic nitrogen – based chemicals.
- Facilities healthy soil formation.
- Organic methods ensure that the soil is healthier and more useful, with its carbon and nitrogen cycle well balanced.
- Combats the effects of Global Warming.

P.R GOVT. COLLEGE (A), KAKINADA
DEPARTMENT OF HOTICULTURE
SEMINAR ON
RECENT TRENDS IN TAXONOMY

CONVENOR

SARA PALAPARTHY
LECTURER INCHARGE

FACULTY

Capt.Dr.M.Krishna Rao

P.RAJESH, P.NICEE, I.ANI, N.NAVYA, P.RAJESWARI, PRABHURAJU, MISPAKUMARI, LAKSHMI CHANDINI

RESOURCE PERSON

DR.VATSAVAYA SATANARYANA RAJU M.Sc.,Ph.D,DAS

Presented PPT in (FN) and identification of different plants present in P.R.G.C campus and Flora present in Botany garden. All Botany and Horticulture faculty were participated and students learn about the identification of flora species and their medicinal value of plants in botany garden. This activity conducted is helpful for botany cluster students.

Dr.VATSAVAYA SATYANARAYANA RAJU has explained about our " TUCHACKO" garden in PRGC(A) college. He was the first botany H.O.D in botany department in

PRGC(A) college (28/6/1933 to 20/3/1952).so our garden name has renowned "TUCHACKO GRADEN".

FICUS RELIGOSA

Common name: Bodhi tree, scared fig tree, pipul tree, Budi, Pipal tree, pipal tree……..

This was located in front of English departments.

A medium sized tree up to 25 to 35m tall leaves are smooth and leathery, broadly ovale, measuring 9-18 cm long and 7.5 -12 cm wide, spirally arranged. The leaves have a distinctive tail-like tip,up to 5cm long. Leaf petioles are slender ,6-10cm long.

CHARACTERISTICS OF FICUS RELIGIOSA:

*Heart shaped leaves or long petioled.

*Fruits are fig like gloubes small and purplish.

*The bark is astringent, sweet, aptirodisiac and the aqueous extract of it It includes large geographical area or a botanical region.

OUTCOMES

- Students will get the knowledge of taxonomical flora
- To understand our botany garden medicinal plants.
- Students learnt about the usage of herbal products.
- In the same way they got to know about the medicine values of a plants.
- Even teachers acquired the knowledge regarding herbal products preparation.

GALLERY

P.R GOVT. COLLEGE (A), KAKINADA
DEPARTMENT OF HOTICULTURE
PG ENTRANCE TEST COACHING
Date: 20-04-2022

AGENDA:

The staff meeting was held in Botany Department. The staff members of the department meet on 20-04-2022 under the chairmanship of lecturer-in-charge and resolved the following regarding Life Science PG Entrance Examination.

RESOLUTION:

- It is resolved to conduct Induction programme in Life Science PG entrance Examination.
- It is resolved to collect 500/- per student from final year B.Z.C, H.B.C, and M.B.C.
- It is resolved to pay 300/- per hour for a resource person for PG Entrance Examination.
- It resolved to assign 72 hours for completion of PG entrance test. • It is resolved to conduct weekly exams.
- It is resolved to assign one course coordinate to look after the total students who are attending classes.
- It is resolved to pay 4000/- to course coordinates for taking care of all the students enrolled in the course.
- It is resolved to get receipt from office for corresponding fee paid by students.

Pursuing a PG in reputed University is considered noble. PG in life sciences has a vast entity to offer various gratifying career opportunities. PGCET there for post-graduation entry. It is one of the most acceptable entrance exams all over India. It has become mandatory to pursue pg for all the graduates to be successful in their respective fields. The students who wish to study various post graduate courses from government or any private colleges can apply.

Eligibility to pursue BOTANY PG entrance exam:

- Pursuing PG after Graduation is one of the most desired dreams for many aspiring candidates. The students having a bachelor degree are eligible to apply for pg entrance.

- Our institute offers the best PG entrance coaching so that aspiring candidates can prepare for the exam.
- All the aspiring candidates can appear through regular offline and online classes offered by OUR institute. Get all the latest question papers to understand the pattern of questions. Video lectures for a better understanding.

What makes our Institute PG preparation special?

- Concept based learning - focused on making sense of the facts. • Solved and unsolved mcqs - assist the students to enhance their ability to solve the mcqs in a stipulated time.
- Latest edition study material - all the latest and necessary information or knowledge provided to the students.

CONEVENOR
SARA PALAPARTHY
(LECTURER INCHARGE)

STAFF MEMBERS
Capt.Dr.M.KRISHNA RAO
P.RAJESH
P.NICEE
B.ASHOK
RAMA
RAJU
I.ANI
N.NAVYA
P.RAJESWARI
M.PRABHURAJ

STUDENT MEMBERS:
R.SHIVA PRASAD
K.SIREESHA

P.R GOVT. COLLEGE (A), KAKINADA
DEPARTMENT OF HOTICULTURE
WORLD BIODIVERSITY DAY
DATE: 22-05-2022

Department of Horticulture visited nearby village to educate people about the World biodiversity day.

THEME:
Building a shade future for all life.

Department of Botany and Horticulture faculty participated along with students

CONEVENOR
SARA PALAPARTHY

STAFF MEMBERS
Capt.Dr. M. KRISHNA RAO
KRISHNA PRASAD
P.RAJESH
I.ANI
M.PRABHU RAJ
G. CHADHINI
G. MISHPA

The Theme of the 2022 International day for biological diversity is (Building shade future for all life.)
UNESCO'S international strategy for biodiversity is based on 3 pillars: restore the relationship between humans and nature regenerate ecosystems; conserve the harmony of our ecosystem; and amplify the power of UNESCO designated sites (World Heritage sites, Biosphere Reserves and UNESCO Global Geoparks) that cover 6% of Earth's landmass , and are key areas where people learn to live in harmony with other living species.

P.R GOVT. COLLEGE (A), KAKINADA

COMMUNITY SERVICE PROJECT
ON TERRACE GARDENING

Ecology practical for UG students conducted in college campus

Practical conducted for PG Students in laboratory

P.R GOVT. COLLEGE (A), KAKINADA

DEPARTMENT OF HORTICULTURE

INNOVATIVE PROJECTS

INCENSE STICKS

INTRODUCTION:

- Incense has played an important role in many of the world's great religions.
- The ancient Egyptians staged elaborate expeditions over upper Africa to import the resins for daily worship before the sun god Amon-Ra and for the rites that accompanied burials.
- The Egyptians also made cosmetics and perfumes of incense mixed with oils or unguents and blended spices and herbs.
- Incense was employed more extensively in eastern religions, • The Hindu, Buddhist, Taoist, and Shinto religions all burn incense in festivals, processions, and many daily rituals in which it is thought to honor ancestors.

RAW MATERIALS:

Dry flowers,Charcoal powder, Bamboo sticks, Saw dust, and perfume ingredients – like essential oils etc.,

PREPARATION

- Stick incense is made with " punk sticks" and fragance oils. • All the components are natural materials.
- The sticks themselves are imported from china and are made of bamboo. • The upper portion of each stick is coated with paste made of sawdust from machilus wood, a kind of hardwood.
- The sawdust is highly absorbent and retains fragance well Charcoal is also used to make the absorbent and retains fragancewell.
- Charcoal is also used to make the adsorbent punk, and it is flavoured in incense sticks nade in India.
- The fragant oils are made of oil from naturally aromatic plants or from other perfumes or frgances that are mixed in an oil base.

- Flowers dumped in this way can be recycled to make incense sticks that make the environment much cleaner.
- Every year 10,000 tonnes of flowers are used and thrown away as waste.

P.R GOVT. COLLEGE (A), KAKINADA

DEPARTMENT OF HORTICULTURE

ACTIVITY REPORT

RICE CROP CULTIVATION

THEME: -

Department of horticulture conducted the activity of rice crop cultivation by botany and horticulture students. In this activity our students cultivated rice crop with azolla and rice crop without azolla separately to evaluate the difference of rice yield with azolla and without azolla .

OBJECTIVES: -

- To evolve high yielding short and medium duration quality rice varieties suited to irrigated condition, dry and semidry conditions.
- To identify resistant sources to biotic and abiotic stresses for drought, major pest and diseases and to develop integrated management in rice.
- To develop nutrient management strategies for rice cultivation.
- To produce quality Grains by using *Azolla* as a Bio fertilizer which provides the Nitrogen fixation to plants
- To provide Organic Rice Grains without using any chemical fertilizers
- To calculate the difference of Rice yield with *Azolla* and. Rice yield without *Azolla*

Cultivation of rice at Botany garden to observe the Growth and Yield of Rice in presence and absence of *Azolla*

Students planted seedling of Rice in the Botany garden

At last we harvested the Rice after three months and got results with high Yield with Azolla whereas less in without Azolla

CONEVENOR
SARA PALAPARTHY
STAFF MEMBERS:
Capt.Dr.M.KRISHNA RAO
P.RAJESH P.NICEE
I.ANI
N.NAVY