

A.S.D. GOVT. DEGREE COLLEGE FOR WOMEN

(AUTONOMOUS) (Re Accredited with 'B' Grade by NAAC) Affiliated to Adikavi Nannaya University Jagannaickpur, Kakinada - 533002 Ph.: 0884-2378446

Website: www.asdgdcw.ac.in

A BRIEF REPORT ON

ONE DAY NATIONAL WORKSHOP

on

" *The Curious World of Algae- Exploring Biological Applications*"





04th July 2024

Organized by Departments of Botany, HomeScience, Zoology & Microbiology



A.S.D GOVT. DEGREE COLLEGE FOR WOMEN, (A) JAGANNAICKPUR, KAKINADA-533002, ANDHRA PRADESH,

ONE DAY NATIONAL WORKSHOP

on

"The Curious World of Algae- Exploring Biological Applications" On 04.07.2024

V. Branta Jall

PRESIDENT Dr.V.AnanthaLakshmi Principal

H. Suvarchala

VICE PRESIDENT Smt.M.Suvarchala Vice-Principal

print

CONVENER K.N.V.S.N.Eswari HOD-Dept. of Botany &Horticulture

D. Viergeger

Organizing Secretary Ms.D.Jayasree HOD- Dept.of MicroBiology

Organized by DEPARTMENTS OF

Botany, HomeScience, Zoology & Microbiology

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DEPT. MINUTES RESOLUTION COPY

87 Departmental Staff meeting 1/7/2024 the Staff members of the Department 1/7/2024 in Botany Dept Staff room to met on Jiscuts the following Agenda Agenda: O'Allocation of papers of I Semester and (Botany & Hot cutter IT semester Bolary major among the staff members to be dealt With @ Conduct of National Workshop on 47/2024 titled as The curious world of Algae - Exploring Bidleg. Aplation Collaboration with all Science Departments the college. 01 3 TO Coleborate Mendels Birthday on 20/7/2024 A TO prepare certificate course envolled students for Exam. conduct of Bos meeting for Both Botany & Hortaulti Subjects. 5 Resolutions : O It is recolved to distribute the F Botany & Morticulture among the the papers of fourty of per the workload Department as the of the Semesters @ It is resolved to conduct National workshop The Curious world of Algae - Exploring m

88 Biological Applications on 4-7-2024 in collaboration with all Science Departments of the college It is resolved to invite Dr. J.V. Sudhakar Asst. professor of Bolany in SRK Government college, yanam as a Resource person for Technical Sersion-I of one day National Warkshop. It is recolved to invite prof. Felix Baser Depr of Botany central university of punjab as a Resource pueen for Tennical Certain II of one day National Wallshop It is resolved to conduct quit competition to the students in connections with Mendels Burthday on 20.7.2024. It is revolved to prepare the students enrolled for cartificate course "Natural farming" for final Ering Or is resolved to conduct Bos meeting through online on 9/7/2024 for Botany & Herticulture Subject Kning Staff! M-Sulakihar Dr. M. Sulakshare (KNVSNEEwini) N. bula mrs. N. pudpe Grechandini ms. G. chanding



FromK.N.V.S.N.EswariLecturer In-Charge,(A) Department of Botany & Horticulture,A.S.D. Govt Degree College for Women (A),Kakinada.

To The Principal A.S.D. Govt Degree College (W), Kakinada.

Respected Madam,

Sub : A.S.D. G.D.C.W(A) –Botany, HomeScience, Zoology, &Microbiology– Request to approve the Proposal of organizing A One-Day National Workshop on "The Curious World of Algae – Exploring Biological Applications " on 04-07-2024 -Reg.

I submit that the Department of Botany, HomeScience, Zoology & Microbiology are planning to organize A One-Day National Workshop on "The Curious World of Algae – Exploring Biological Applications " on 04-07-2024 which is beneficial to both the Faculty and the students. In this regard, I request you to kindly give us permission to organize the Workshop.

Thanking you, Madam.

Yours faithfully,

Depar my Wom D.G

(K.N.V.S.N.Eswari)

(K.N

Place: Kakinada Date: 2.07.2024

A.S.D.GOVT.DEGREE COLLEGE FOR WOMEN (A)

(Re-Accredited with 'B' Grade by NAAC) (Affiliated to Adikavi Nannaya University)

DEPARTMENTS OF BOTANY, HOMESCIENCE, ZOOLOGY&MICROBIOLOGY

CIRCULAR

స్త్రీవిద్యా ప్రవర్థతాం

The Departments of Botany, Home Science, Zoology & Microbiology wishes

to arrange a One-Day National Workshop on

" The Curious World of Algae – Exploring Biological Applications "

on

04-07-2024 in Seminar Hall

In this connection all the students are informed to attend the Workshop and make the best out of it.

Lecture Incharge in Botany AD. Gov. Degree College for Work KAKINADA

N. NO O PRINCIPAL A.S.D.GOVT.DEGREE COLLEGE (MI AUTONOMOUS KAKINADA

In-Charge of the Department of Botany

Principal

About the College:

offers 12 UG Honours and 3 PG programmes: In introduced B.Sc Honours Single major programmes tune with National Education Policy 2020, college Digital Classrooms and LMS. At present, the college the College. The College is mainly equipped with Welfare Hostels within a vicinity of 2 kilometres from only Government Degree College for Women in the Woman, you educate an entire family". This is the words by Mahatma Gandhi, "If you educate a man, Shall Prosper'. The idea came up with the inspiring College for Women (Autonomous), Kakinada, E. G Annavaram Satyavathi Devi Government Degree has a student enrolment is about 1045. The college Smart Campus services like Virtual Classrooms Managed Hostel within the campus and 4 Social entire coastal belt of Andhra Pradesh, with a Student you educate an individual, but if you educate a Vidya Pravardhataam' means 'Women Education District was started in 1962 with the motto: 'Sthree

from 2023-24. B.A Honours (Economics), B.A Honours (Political Science), B.A Honours (Political Science), B.A Honours (History) B.Com Honours (General), B.Com Honours (Computer Applications) , B.Com Honours (Computer Applications) , B.Com Honours (Banking Financial Services & &Insurance) B.Sc.Honours(HomeScience) B.Sc.Honours(Chemistry)B.Sc.Honours(Zoology)

B.Sc.Honours(Mathematics),
B.Sc Honours (Microbiology) and PG programmes:
M.A. (Telugu), M.Com & M.Sc (Organic Chemistry).
The College uses every opportunity with great care in strengthening the students to excel in their academics and get decent jobs.

B.Sc.Honours(Botany)B.Sc.Honours(Physics)

B.Sc.Honours(Computer Sciences)

About Department of Botany & Horticulture: The Department of Botany is as old as the establishment of the Institution itself. In short it is a 61 year old department, established in 1962. The Department started Horticulture group in the year

> of the college. The Department conducts Field trips among the people residing in the local surroundings conduct Medicinal Plant Drive every year to bring offers certificate courses in Organic Farming, and the propagated by them. Blossoms Nursery and selling saplings which are regularly. The students of our Department started awareness about the medicinal importance of plants campus. The Faculty & students of the Department students are maintaining NADEP compost pit in the Fruit crops and Flowering plants. The Department Plants and Horticulture garden with Vegetable crops, consisting of different plant species and rare Medicina Laboratories, Dr. Janaki Ammal Botanical Garden The Department is having two well equipped Honours Botany and Horticulture as Minor subject 2020. At present the Department is offering B.Sc

About Department of Homescience

Home Science is an interdisciplinary field of knowledge withfocus on Human Development,Food &Nutrition,Fabric&Apparel Designing, Resource Management and Extension &Communication.It is an education for better living. The alumni of Home Science are working as Teachers, Researchers, Academicians, Dietitians, Counselors, Interior Designers, Fashion Designers, Child Development Experts, etc. The department is catering to the needs of girl students from all over the region covering the districts of East& West Godavari, Srikakulam, Vizag and Vizianagaram. As part of Institutional Social Responsibility, the department is conducting various Extension Activities and TOT programs for the betterment of the local

community. About Department of Microbiology

The department of Microbiology was established in the year 1998-99. It was started under the restructured course with the combination of Botany and Chemistry at Under Graduate level The Department is offering UG programme B. Sc C.B.MB The intake of the students is 30. The asset of the Department is its well equipped One UG Laboratory attached with a culture room facility. At present the Department is

offering B.Sc Honours Microbiology and also as Minor. The Department is giving importance to the student centric & skill oriented programmes "The Vision of the Department is to educate and train students in the discipline of Microbiology and to produce competent Microbiologists" and serve the Society by promoting science and its allied fields". The Department offers certificate course in Clinical laboratory techniques which helps students in skill enhancement and career opportunity with undergraduation.

About Department of Zoology & Aquaculture Technology

achieve their goals and make a positive impact on strives for nurturing the students, who are ready to and advanced aspects of Zoology. The department has rigorous programmes and initiatives, the department approach and flexibility, in tune with National Education applications. To emphasize the multidisciplinary the growing interest in Aquaculture and its technological introduced B. Sc- Chemistry, Zoology, & Aquaculture & Zoology at undergraduate level until the academic offered B. Sc with a combination of Chemistry, Botany, College for Women was established in 1962 with a society. Aquaculture and Zoology as minor subjects. With the (Honours) Zoology as single major programme, and Policy 2020, the department introduced B. Sc Technology as a restructured programme catering to year 2022-2023. From 2018-2023, the department vision of advancing knowledge in both the fundamental The Department of Zoology at ASD Government Degree

About the Programme

The Curious World of Algae: Exploring Biological Applications Biologists explore nature out of curiosity to obtain fundamental knowledge about different types of organisms. Algae are a class of photosynthetic organisms found in both marine and freshwaters habitats. As these organisms have a short doubling time, they are considered among fastest growing creatures. They have different pathways to fix atmospheric carbon dioxide and to efficiently utilize

> the nutrients to convert it into biomass. In few years, a focus has been shifted towards these organisms due to their food and fuel production capability. Algae as a food have been explored for different applications as in production of single cell proteins, pigments, bioactive substances, pharmaceuticals and cosmetics. The present workshop has been a trial to throw a light on enormous applications of algae as food and fuel and also to provide some information about different commercially available algae products. **OBJECTIVES OF THE PROGRAMME**

1.Ecological and environmental importance 2.Algae in research & Food Production

Algal Biomass & Biofuel Production
 Industrial and Biotechnological Applications of Algae

PROGRAMME SCHEDULE

10am-11am: Inauguration of the Program

11 15-1 pm: Session I

11.15-1 pm: Session I

1 – 2 pm: Lunch Break

2-4pm: Session II

4 - 5 pm: Valedictory

REGISTRATION FEE - FREE

Participants will get a Certificate

CHIEF PATRON

Dr. Pola Bhaskar, IAS Honourable Commissioner of Collegiate Education. Mangalgiri, Andhra Pradesh.

PRESIDENT

Dr. V. Anantha Lakshmi, Principal

VICE-PRESIDENT Dr. M. Suvarchala, Vice Principal

IQAC COORDINATOR

Ms. M. Vasantha Lakshmi, Incharge of Zoology

RESOURCE PERSON 1

Dr.J.V.Sudhakar,Assistant Professor, HOD, Department Botany Dr.SRK Govt Arts College,Yanam-533464, UT of Puducherry.

RESOURCE PERSON 2

Prof. Felix Bast Professor, Department of Botany, Central University of Punjab, Ghudda, 151401, Punjabfelix.bast@gmail.com

CONVENOR

Ms.K.N.V.S.N.Eswari, Incharge of Botany and Horticulture

ORGANIZING SECRETARY

Smt. Danduprolu Jayasree Lecturer Incharge Microbiology

ORGANIZING COMMITTEE

Dr. K.Lavanya Lecturer in Home Science Dr. G.Anitha Lecturer in Home Science Dr. M.Sulakshana Lecturer in Botany Mrs. S. Madhavi Lecturer in Zoology

OBJECTIVES & OUTCOMES

A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A)

(Re-Accredited with 'B' Grade by NAAC) (Affiliated to Adikavi Nannaya University) Jagannaickpur, Kakinada.

One - Day National Workshop on

"The Curious World of Algae – Exploring Biological Applications" Organized by

DEPARTMENTS OF BOTANY, HOMESCIENCE, ZOOLOGY & MICROBIOLOGY

on

04th July, 2024

Objectives of the Workshop:

The workshop is aimed to achieve the following objectives:

- 1. Knowledge Dissemination: Disseminate up-to-date information on the latest trends, advancements, and challenges in the fields of Biological Sciences
- 2. Educational Enrichment: Enhance the understanding of participants regarding the evolving landscape of Biological Sciences, with a focus on Exploring Biological Applications of Algae
- 3. **Research Exploration:** Unveil and discuss various research opportunities in Life Sciences providing participants with insights into emerging trends, interdisciplinary collaborations, and the potential impact of their contributions.
- 4. **Professional Development:** Provide a platform for professional development by exposing participants to the expertise of seasoned professionals and academics, allowing them to gain valuable insights and perspectives.
- 5. **Feedback and Improvement:** Gather feedback from participants to continually improve and enhance future iterations of similar workshops, ensuring that the content and format remain relevant and beneficial.
- 6. Celebration of Achievements: Acknowledge and celebrate the achievements of participants, speakers, and organizers, fostering a sense of accomplishment and pride in contributing to the success of the workshop.

By aligning with these objectives, the workshop aimed to create an engaging and collaborative environment where participants could actively contribute to discussions, learn from experts in the field, and leave with a renewed sense of enthusiasm and knowledge to navigate the future of technology in the field of Biological Sciences

Learning Outcomes of the Workshop

The outcomes of the workshop, " *The Curious World of Algae – Exploring Biological Applications*," were multi- faceted, encompassing both tangible and intangible achievements. The workshop aimed to empower participants with knowledge, insights, and a sense of community, fostering a positive impact on their understanding of technology and its future. Here are the key outcomes:

1. Enhanced Knowledge Base:

- Participants are expected to gain a deeper understanding of the evolving landscape of Science education, industry-relevant content integration, and the challenges and opportunities within the field.
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2. Insights into Research Opportunities:

- Attendees are expected to be exposed to various research opportunities in the field of Life Sciences, including emerging trends, interdisciplinary collaborations, and practical applications. This knowledge is anticipated to equip them to explore research paths and contribute to the academic and industrial advancement of the field
- 3. Inspiration and Motivation:
 - Attendees are expected to be inspired and motivated to think creatively, embrace curiosity, and actively contribute to the evolving landscape of technology.in Biological Sciences

4. Professional Development:

• The workshop is anticipated to contribute to the professional development of participants by exposing them to the expertise of seasoned professionals and academics.

5. Positive Community Building:

• The workshop is expected to create a positive and collaborative community of learners, educators, and professionals interested in the future of technology. In the field of Biological Sciences

In summary, the workshop's outcomes encompassed academic enrichment, skill development, and the cultivation of a positive and collaborative community committed to advancing the possibilities within the ever-evolving field of technology.in the field of Biological sciences

PROFILES OF THE RESOURCE PERSONS

Resource Person I – Dr.J.V.Sudhakar

CURRICULUM VITAE

1.

Dr. J.V. SUDHAKAR M.Sc., B.Ed., Ph.D., F.I.A.T.

Assistant Professor & Head Department of Botany Dr. SRK Govt. Arts College Affiliated to Pondicherry University Yanam – 533 464, UT of Puducherry Mobile: 9244214784 E-mail: jysbsificus@gmail.com

1. Academic accomplishments :

SI.No	Degree	Specialization/	University / Institution	Year of
		Subjects studied		Completion
1	Ph.D.	Botany –	Bharathiar University, Coimbatore,	2014
		Plant Taxonomy	Tamil Nadu	
2	M.Sc.	Botany	Annamalai University, Annamalainagar,	2006
			Tamil Nadu	
3	B.Ed.	Biology	Andhra University, Visakhapatnam,	2002
			Andhra Pradesh	
4	B.Sc.	Botany, Zoology	Andhra University, Visakhapatnam,	2001
		Chemistry	Andhra Pradesh	
5	Diploma	Computers	CSC Computers, Coimbatore, Tamil Nadu	2007

2. Area of Interest:

- Plant Taxonomy
- Systematics
- Medicinal Plants Herbal botany
- Conservation Biology
- Environmental Science

2. Professional / Experience:

SI.No	Field of	Institution / Organization	Nature of	From	То
	Experie		Appointment		
	nce				
1	Teaching	Dr. SRK Govt. Arts College,	Assistant Professor	02.02.2018	Till date
		Yanam- 533 464, UT of			
		Puducherry			
		Affiliated to Pondicherry			
		University			
2	Research	Botanical Survey of India, SRC,	Botanical Assistant	02.07.2010	01.02.2018
		Coimbatore – 641 003, Tamil			
		Nadu			
3	Research	Botanical Survey of India, SRC,	Junior Scientific	15.06.2006	01.07.2010
		Coimbatore – 641 003, Tamil	Assistant		

		Nadu			
4	Teaching	Vikas Junior College, A.V.	Junior Lecturer in	June 2004	June 2006
	_	Palem (Malikipuram) - 533 253,	Botany – Part time		
		E.G. Dsit.	Temporary		
		Andhra Pradesh			

4. Publications:

A. Published Books:

SI.No	Title of the Book with	Author/Coauthor	Publishers	Year of
	ISSN/ISBN No	Editor/Co-editor	Name	Publication
1 Fi	gs of Eastern Ghats, India.	J.V. Sudhakar,	National Biodiversity	
IC	DNL 070 160410252 4	N. Chandra Mohan	Authority (NBA),	2017
15	BIN: 978-108418332-4.	Reddy &	Chennai & Pragati	
		G.V.S. Murthy	Offset Pvt. Ltd.	
		_	Hyderabad.	

B. Journal Articles: 28

Sl.No	Title of the Paper	Journal	Volume, Issue & Page Nos. & ISSN No:
1.	Karthikeyan Mahima, Senthilkumar Umapathy, Jana Venkata Sudhakar, Ramalingam Sathishkumar. 2021. Systematic reinstatement of highly sacred <i>Ficus krishnae</i> based on differences in morphology and DNA barcoding from <i>Ficus</i> <i>benghalensis</i> (Moraceae).	18 ytokeys ISS	6: 121–138 SN: 1314-2003
2.	Shaikh Mujaffar, Arjun Prasad Tiwari, Praveen Chandra Dubey, Jagannath Vishwanath Gadpayale J. and Jana Venkata Sudhakar. 2021. Ficus johannis subsp. ghanistanica (Moraceae)—A New Record for India	Jpn. Bot. 96 ISS	(1): 21–24 SN: 0022-2062
3.	N. Chandra Mohan Reddy, J.V. Sudhakar and Boyina Ravi Prasad Rao. 2020. Extended Distribution of <i>Ficus fergusonii</i> (King) T. B. Worth. ex Corner and <i>Ficus travancorica</i> King (Moraceae)	dian J. Forestry 43	8(2):136-142 ISSN: 0971-9431
4.	N. Chandra Mohan Reddy1, P. Anjaneyulu, S.M. Nagesh, J. V. Sudhakar , B. Ravi Prasad Rao. 2020 . Diversity and Distribution of Wild Figs (<i>Ficus</i> L.) of Andhra Pradesh, India	oscience Discovery 11 ISS	(4):223-235. SN: 2229-3469
5.	Karthikeyan Mahima, Jana Venkata Sudhakar & Sathishkumar Ramalingam. 2020. Taxonomic delimitation of endemic <i>Ficus amplocarpa</i> and <i>Ficus dalhousiae</i> Complexes (Moraceae) by DNA barcoding	Phytotaxa	436 (1): 021–035 ISSN: 1179-3155
6.	Abhipsa Mohapatra, Jana Venkata Sudhakar , Malapati Kuppuswamy Janarthanam. 2020. Extended distribution of <i>Ficus costata</i> Aiton (Moraceae) in Western Ghats, India	Feddes Repertorium	131: 69–71 ISSN: 1179-3155
7. Ka	rthikeyan Mahima, Jana Venkata Sudhakar , and Ramalingam Sathishkumar. 2020. Molecular phylogeny of the <i>Ficus virens</i> complex (Moraceae)	enome 63 IS	: 597–606 SN: 0831-2796
8. J.V	Sudhakar, Arumugam, S. and C. Murugan. 2018. <i>Psidium cattleyanum</i> (Myrtaceae): Naturalised edible species in Agasthyamalai Biosphere Reserve, India	dian J. Forestry	41(3): 287-289. ISSN: 0971-9431

	1	
9. Kabeer, K.A.A, J.V. Sudhakar, J.H. Franklin,	DIO	9 (1): 70 – 92.
Benjamin, M. Mohanan & G.V.S. Murthy. 2018 . Floristic composition of Mukurthi National Park: a sky island in the core zone of the Nilgiri Biosphere Reserve.	BIO	ISSN: 2278-2281
10. J.V. Sudhakar and G.V.S. Murthy. 2017. Taxonomy and distribution of <i>Ficus talbotii</i> (Moraceae) in India.	eedea IS	7 (1): 16-19. \$N: 0971-2313
11. J.V. Sudhakar and G.V.S. Murthy. 2016. Extended Distribution of <i>Ficus superba</i> (Miq.) Miq. & <i>F. middletonii</i> Chantaras. (Moraceae).	dian J. Forestry	39(3): 255-261. ISSN: 0971-9431
12. J.V. Sudhakar and G.V.S. Murthy. 2016 . Identity of <i>Ficus amplocarpa</i> and <i>F. guttata</i> (Moraceae), the two closely allied south Indian endemic species and their conservation status.	eedea IS	26 (1): 69-73. \$N: 0971-2313
13. R.Kr. Singh, B. S. Kholia & J.V. Sudhakar . 2016 <i>Pedicularis artiae</i> , a new species of Orobanchaceae from Sikkim Himalaya, India.	71 w Bulletin IS	(3):36. \$N: 007-55974
 Niranjan Gupta, Nikhiles Biswas and J.Venkata Sudhakar. 2016. Amazing World of Grasses. 	IV <i>i J. Tech. Res. Innov</i> . _{IS}	7(II): 5-11. 1 <u>\$N: 09709592</u>
15. J.V. Sudhakar & G.V.S. Murthy, 2015 . <i>Ficus anamalayana</i> (Moraceae): A new species from South India.	eedea	25 (1): 01-08. ISSN: 0971-2313
16. J.V. Sudhakar , R Mehala Devi and GVS Murthy. 2015 . Additions to the Flora of South Indian States.	nals of Plant Sciences.	4 (07): 1158-1161 ISSN: 2287-688X
17. Rinkey Tiwari, Jana V. Sudhakar , LAL B. Chaudhary, Garimella V.S. Murthy & Anjala Durgapal. 2015 . Revisit the taxonomy of <i>Ficus krishnae</i> (Moraceae).	ytotaxa IS	92 (3): 169 \$N: 1179-3155
18. R.K. Singh, P. G. Diwakar & J.V. Sudhakar. 2015 , <i>Bauhinia phoenicea</i> B. Heyne <i>ex</i> Wight & Arn., the less known endemic and threatened liana of the southern Western Ghats, requires immediate conservation	Threatened Taxa	7(10): 7676–7682. ISSN: 0974-7893
 19. Rinkey Tiwari, Jana Venkata Sudhakar, A.K. Srivastava, L.B. Chaudhary, G.V.S. Murthy & A. Durgapal. 2014. Taxonomy, distribution and diversity of <i>Ficus palmata</i> Forssk. subsp. <i>virgata</i> (Roxb.) Browicz (Moraceae) in India. 	Threatened Taxa	6(9): 6172–6185. ISSN: 0974-7893
 20. P. Satyanarayana & J.V. Sudhakar. 2013. A note on Taxonomy and Distribution of <i>Abelmoschus caillei</i> (A. Chev.) Stevels (Malvaceae) in India. 	dian J. Forestry 36	5 (1): 115– 118. ISSN: 0971-9431
21. C. Murugan, G.V.S. Murthy and J.V. Sudhakar. 2013 , Diversity, Distribution and uses of <i>Ficus</i> L. (Moraceae) in Andhra Pradesh, India: A Review.	Andaman Sci. Assoc. ¹⁸ IS	3 (2): 192-196. \$N: 0970-4183
22. J.V. Sudhakar & G.V. S. Murthy, 2012 . <i>Ficus variegata</i> (Moraceae), a new record for Peninsular India.	eedea	22(1): 62-65. ISSN: 0971-2313
23. J.V. Sudhakar & G.V. S. Murthy. 2012 . Additions of <i>Ficus L</i> . (Moraceae) species to the South Indian States.	dian J. Forestry	5(3): 345 –350. SN: 0971-9431
24. Lal Babu Chaudhary, Jana Venkata Sudhakar , Anoop, Kumar, Omesh Bajpai, Rinkey Tiwari and G.V.S ⁴ Murthy. 2012 , Synopsis of the Genus <i>Ficus</i> L	iwania IS	57(2): 193–216. \$N: 0372-333X

	(Moraceae) in India		
25 Ar	oon Kumar, O. Bainai, R. Tiwari, R. Jana Venkata		12: 82-88
20.711	Sudhakar & L. B. Chaudhary.2012. Taxonomic	ytotaxonomy ISS	N: 0972-4206
	notes on the Identity and Nomenclature of Ficus		1200
	assamica Miq. (Moraceae).		

26. A.	Vijayan, J.V. Sudhakar & C. Sebastian Rajasekaran, 2011. Rediscovery of <i>Elaeocarpus blascoi</i> Weibel (Elaeocarpaceae) from Palni Hills of Western Ghats, Tamil Nadu.	Econ. Taxon. Bot.	35 (3): 618-620. ISSN: 0970-3306
27. M.	Mohanan & J.V. Sudhakar. 2008 . <i>Sesbania sericea</i> (Willd.) Link (Leguminosae: Papilionoideae) - a new record for India. ^{Bu}	ll. Bot. Surv. India. ISS (Nelumbo)	50 (1-4): 171-172. SN: 0976-5069
28. C.	Murugan & J.V. Sudhakar. 2008. <i>Mastixia euonymoides</i> Prain (Cornaceae): An addition to the Flora of Tamil Nadu.	ll. Bot. Surv. India. ISS (Nelumbo)	50 (1-4): 204. SN: 0976-5069

	SI.No	Title of the Paper	Book Title & Ed	litors		Publication
] : J (J	 J.V. Sudhakar & Niranjan Gupta Haloragaceae; J.V. Sudhakar & J. H. Fra Benjamin: Turneraceae; G.V.S. Murthy & J.V. Sudhakar Datiscaceae. 2016. J.V. Sudhakar, Rinkey T Sreyoshee Sen Sarma, C Murthy J.B. Chaudhary & 	Flora of Kerala. Vol. 2. ankli G .V.S. Murthy & V.J. Na Tiwar <i>Elora of Kerala</i> . Vol. 24. G.V.S.	ir (Eds.).	Bota Indi ISB 7 Bota Indi	Particulars anical Survey of a, Kolkata. N: 81-8177-089- anical Survey of a, Kolkata.
I	B. Se	Sinha) – Ficus L. (Moraceae)	s Presented / Participated:	6		
;∎.	Νο	Title of the paper Presented	Title of Conference Participated	Organiz ed by	Ye ar	Whether Internat. /National/Stat e /Reg. / College or Univ. Level
	Stu	dy on Morphology and DNA 27 Barcoding of Four Taxonomically complex groups of <i>Ficus</i> L. (Moraceae).	th IAAT Annual conference and International Symposium on Plant Systematics: Priorities & Challenges, New Delhi:	20 DEPT. BOTANY, DELHI IVERSITY	17	International
	Ap	plication of DNA Barcoding to Int Unravel the Taxonomical complexity in <i>FICUS</i> L. (MORACEAE) of Western Ghats, India	ernational Conference on DNA technology for authentication, quality control and conservation of herbal material, Hong Kong	THE 20 CHINESE UNIVERSIT Y OF NG KONG	16	International
	IU	CN Assessment of an endemic Sil and endangered species <i>Ficus</i> <i>guttata</i> (Moraceae) and its differences with <i>F. amplocarpa</i> .	ver Jubilee Conference of IAAT and Council Meeting of IAPT & International UN Seminar on Advancements in Angiosperm Systematics and Conservation, Calicut	dept. 20 botany, calicut iversity	15	International
	Su	rvey of Endemic and ThreatenedSil Plant taxa in Palani hills of Kodaikanal Forest Division, Tamil Nadu, India.	ver Jubilee Conference of IAAT and Council Meeting of IAPT & International UN Seminar on Advancements in Angiosperm Systematics and Conservation, Calicut	DEPT. 20 BOTANY, CALICUT IVERSITY	15	International
	En	demic <i>Ficus</i> L. (MORACEAE) 24 species and their Distribution in India.	th Annual conference of IAAT and International conference on Trends in Plant Systematics, Trichy	DEPT. 20 PLANT SCIENCES, BHARATHI DASAN IVERSITY	14	International
j	Div	versity and Taxonomy of <i>Ficus</i> <i>palmata</i> Forssk ssp. <i>virgata</i> (Roxb.) Browicz (Moraceae) in India.	23 th Annual conference of IAAT and National Seminar on Recent Advances in Plant Taxonomy Research, UN Nagpur.	PG DEPT. 20 BOTANY, RTM NAGPUR IVERSITY	13	National

SI.	No	Title and date of the talk Presented	Title of Conference	Organized by	Whether International /National / State /Regional / College or University Level
1.	W	ebinar on 'A Glimpse dfro Indian Figs (Ficus species) and its Economic Importance'	Di om Seeds to Shades – All About Plants	gha Science Centre and National Science Camp (NCSM), Ministry of Culture, Digha – 721463, West Bengal	National
2.	W	ebinar on 'Figs of Wester#3 Ghats: A Multicusine Restaurant of the Wild' on 2.8.2020	Ce Natural Trail au Singanallur Lake, Coimbatore	ntre for Urban Biodiversity Conservation and Education (CUBE), Singanallur Lake, Coimbatore	Regional
3.		Invited lecture on 'DetaileNa Study of Plants in Vedic Period used as medicine with reference to Charaka Samhita & Sushruta Samhita' on 24.1.2020	tional Worksho p e on Vedic Approaches in Medicinal Plants and Ayurveda	partment of Botany & Sanskrit, A.S.D. Govt. Degree College for Women (A), Kakinada, st Godavari District	National
4.	In	vited lecture oNa 'Experimental Approach to Plant Taxonomy and Ecological Methods' on 18.08.2018	tional Workshoper on Experimental approach on Vrikshaavaran	PT. OF BOTANY, SIDDHARTHA COLLEGE OF ARTS & SCIENCE AND MAHILA KALASALA, AYAWADA	National
5.	K	by note address - Diversity off Genus <i>Ficus</i> L. (Moraceae) in Western Ghats and its implications to animals, birds and humans. on 29.8.2017	tional Seminar on Biodiversity and Importance of Western Ghats for Better Living	DEPT. OF BOTANY, GOVT. COLLEGE KASARGOD, RALA	National
6.	In	vited Lecture-"Introduction tNa Herbarium Techniques" on 24.09.2014	tional seminar cum workshop on "Plant systematics and Herbarium Techniques"	DEPT. OF BOTANY, KKTM COLLEGE, KODUNGALLUR, KERALA	National

Programme attended: 2+8+7 = 17

	SI.No	Title of the Programme	Sponsors	Venue & Duration	Whether
					Internat.
					/National /
					State /Reg. /
					College or
					University
					Level
					Level
		Orientation/	Refresher/ Sho	ort term Courses	
1	U	GC sponsored 14 th Refresher	University of	University of Mysore,	National
		course in Life Sciences	Mysore,	UGC HRDC, Mysore.	
				29.09.2021 to 12.10.2021	
			UGC HRDC,		
			Mysore		
2	L II	GC sponsored 130 th	LIGC HRDC	UGC HRDC, Pondicherry	National
-		Orientation course	Pondicharry	University, Puducherry	
		Uniciliation course	I Underfield	20 th November to 10 th	
			University,	December, 2019	
			Puducherry	,	
		Faculty De	velopment Pro	grames (FDPs)	1
1		Development of Effective E-	S Jain Institute	KS Jain Institute of	National
1		Contents and Online	of Engineering	Engineering and	Individ
		leaching, Learning &		Technology, Modinagar,	
		Evaluation		Ghaziabad.	
			Technology	1.10.2020 to 7.10.2020	
		E-Contents and ICT Tools		Roorke College of	
2		for Innovative and Effective R	oorke College of	Management & Computer	National
		Teaching & Learning	Management	Applications Roorke	
		Process	& Computer	Litteralthand	
			Applications.	$\bigcirc \text{uaraknand.} \\ 8 & 9 & 2020 \text{ to } 14 & 9 & 2020 \\ \hline \end{tabular}$	
		Usage of ICT in Teaching D	ant of Comments	0.0.2020 10 14.8.2020	
3		Usage of ICI in Teaching De	ept. of Computer	IVIVINJS & KVK College of	National
		Learning Process	Science &	Arts & Science,	
			IQAC	Malikipuram – 533 253	
				East Godavari District, AP	
				1.8.2020 to 4.8.2020	
л		ICT Tools for effective online	AC & Dont of	Dept. of Collegiate	ntor National
4		Teaching and Learning	AC & Dept. of	Education, Govt. First	inter National
			Computer	Grade College, Ranebennur	
			Science in	- 581 115	
			association	Haveri Karnataka	
			with Karnatak	29.6.2020 to 5.7.2020	
			University		
_	•	ling togething using ICT T- 1	Dert	SVKP & Dr. K.S. Raju Arts	Netional
5	Ur	inne teaching using IC1 1 ools	Dept. of	& Science College,	National
			Electronics	Penugonda. West Godavari	
			and Computer	District AP	
			Science &	23 6 2020 to 25 6 2020	
			IQAC		
		ICT A Novel Means to A	urora's DegreeA	rora's Degree and PG	
6		Fortify the Faculty in Life	and PG	college.	National
		Sciences	college	Hyderahad Telangana	
			conege,	1 1 yuci abau, 1 cialigalla 8 6 2020 to 0 6 2020	
			Hyderabad	0.0.2020 10 9.0.2020	
			-	Dr MGP Educational P	
7	Vi	rtual Teaching Learning	Faculty of	Di. WI.G.K. Educational &	National
		MOODLE the Effective way	Humanities	Kesearch Institutes.	
			and Science &	raculty of Humanifies and	
			The Institute of	Science – Adayalampattu	
			Engineers	Phase-II Campus, Tamil	
			(India)	Nadu.	

7. Research Projects: 4

SI.No	Title of the Project	Status (ongoing/ Completed)	Funding agency
1	C. Murugan, J.V. Sudhakar & S. Armugam. "Cyperaceae of Tamil Nadu". Duration: 2015-2018.	Completed	BSI, Annual Budget
2	J.V. Sudhakar . "Seed Morphology of <i>Ficus</i> L. using SEM". Duration: 2012-17.	Completed	BSI, Annual Budget
3	M. Mohanan & J.V. Sudhakar. "Flora of Mukurthy National Park and Naduvattum", Duration: 2007-09.	Completed	BSI, Annual Budget
4	* Status and distribution surveys of threatened plant taxa in Palani Hills of Kodaikanal Division, Tamil Nadu – TBG Project, by Prof. M.V. Rao & Asst. Prof. T. Senthil Kumar, Bharathidasan University, Trichy. (* Dr. J.V. Sudhakar , Deputed as a Taxonomist). Duration: 2014- 15.	Completed	Govt. of Tamil Nadu & JICA - Japan

8. Affiliation in Academic Bodies/Societies/Committees

SI.N o	Name of the Body/Society/Committees	Nature of Affiliation
1	'Indian Association for Angiosperm Taxonomy (IAAT)' - Calicut, Kerala	Life Member

9. Achievements / Awards:

SI.No	Details of award / Prize	Year	Contribution
1	Prof. K.S. Manilal Award	2015	For the best oral presentation of <i>Ficus</i> L.
			work at IAAT Silver Jubilee Conference
2	Fellow of the Indian	2015	
	Assosication for Angiosperm Taxonomy (FIAT)		For contributions in the field of Angiosperm Taxonomy for last 10 years

10. Extra/Extension Work:

(NCC, NSS, NGC, etc)

- Developing Awareness about 'RRR' (Reuse, Reduce and Recycle) and Eco-friendly activities among general public and student communities through practical applications and lectures.
- > Developing Botanical Garden with themes for practical study of Botany & Zoology students.

PhD (Japan), FLS (London)

Professor

Department of Botany, Central University of Punjab, Ghudda, 151401,

Punjab

felix.bast@gmail.com +91 9872152694

Prof. Felix Bast is currently based at Department of Botany, Central University of Punjab (Ministry of education, Govt. of India) as a full professor.

He is a member of the high-profile advisory committee of Paris-based International Science .Council, an elected fellow of the Linnean Society of London, and a member of IUCN, Geneva. A BSc .GoldMedalist, he holds PhD in Marine Biology

from MEXT, Japan (alumnus of MEXT Japanese Govt. international doctoral fellowship) and served as expedition scientist in Indian Antarctic Mission.

Prof. Bast discovered seven new marine algae and moss species from India and Antarctica. He served as an in-residence intern with the President of India at Rashtrapati Bhawan, New Delhi and received "President's Inspired Teacher" recognition in 2015.

He also won the prestigious "Teaching Innovator Award" from Ministry of Education in 2020. He has become an advisor to UPSC in 2024. He is the alumnus of IIT Bombay, Friday Harbor Laboratories (University of Washington, USA), and Marine Biological Association of UK laboratories, Plymouth, UK.

He served as a guest scientist at Leibniz Centre for Tropical Marine Research, Bremen, Germany during 2018–19 period.

For research and dissemination purposes, he visited 26 countries. He has over 135 peer reviewed . . .papers, published 8 books, won 17 research projects amounting to 2.8 Crore rupees, and guided 16 .PhD theses.

Prof. Bast advocates a sustainable lifestyle- a primary focus of his works. He has no car and never plans to own one; instead, he is an avid cyclist who often commutes to his workplace by cycle.

He is also a frequent blood donor, and an advocate of zero-waste and low-carbon footprint lifestyle. He has also signed up for posthumous organ and whole-body donation for medical research through NOTTO, the Government of India.

SKILLS/KEYWORDS

Algal Taxonomy, DNA Taxonomy, Molecular Phylogenetics and Phylogeography, Seaweed Biology, Phylolinguistics, Antarctic Flora, Science Communication, Digital Education, Science Diplomacy, Critical Thinking

AWARDS

Elected Fellow of Linnean Society of London, UK (2022), Member of IUCN (2022) Inducted in International Science Co uncil, Paris (2021) AAAS- TWAS Science Diplomat Alumni (AAAS- TWAS, 2020) Advisor to UPSC (2024), DST - YASH (2020), TedX Speaker (2020) Elected in National Core Committee of INSA -INYAS (Biology and Medicine) 2020 DST- INSA- INSPIRE Faculty Award Phylogenetic Diversity of Seaweeds (2012)

Inspired Teacher recognition Invited In -Resident Intern with President of India at Rashtrapati Bhavan, New Delhi (2015), Teaching Innovator Award, MHRD, Government of India (2016)

NAM - ZMT Germany International Guest Scientist Award, 2018 Japanese Govt. Monbukagakusho:MEXT

International Doctoral Fellowship 2005, British Phycological Society Student Bursary Award - 2009

CSIR- UGC National Eligibility Test Qualified Dec 2001 for JRF and Lectureship

Indian Academy of Sciences Summer Research Fellowship at NIO, Goa - 2002 University First Rank for BSC (2000) CSIR -JRF-NET, GATE, GRE, TOEFL qualified

PROGRAMME SCHEDULE

A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A)

Kakinada

ONE DAY NATIONAL WORKSHOP

ON

"The Curious World of Algae: Exploring Biological Applications" On 04-07-2024

Organized by

Science Departments

PROGRAMME SCHEDULE

Inaugural Session :

- Welcoming Guests : Smt. D.Jayasree
 Lecturer in Microbiology
- Prayer By

: O. Ramyasri, B. Laxmi Alekhya, II B.sc Zoology (Honours)

- Lightening the Lamp
- Opening Remarks
 : Dr. V. Anantha Laxmi, Principal
- Addressing the gathering : Dr. M. Suvarchala, Vice Principal
- Srief Note by IQAC Coordinator : Ms. M. Vasantha Lakshmi, Incharge Dept of Zoology
- Introduction of Resource Person : Mrs. S. Madhavi Lecturer in Zoology
 Technical Session 1 : Dr.J.V.Sudhakar,
 - Assistant Professor Dept. Botany

Dr-SRK Govt Arts College

Yanam-533464, UT of Puduchorry	
* Vote of Thanks for session 1	: Dr.M.Sulakshana Lecturer in Botany
Momento Presentation	
Introduction of Resource Perso	on 2 : Smt. D.Jayasree
	Lecturer in Microbiology
Technical Session 2	: Professor. Felix Bast
	Department of Botany,
	Central University of Punjab,
	Ghudda, 151401, Punjab
	felix.bast@gmail.com
♦ Vote of Thanks for session 2	: Mrs. S. Madhavi
	Lecturer in Zoology
Momento Presentation	
Closing remarks & Vote of That	anks : Ms.K.N.V.S.N.Eswari
	Lecturer Incharge of Botany and Horticulture

LIST OF PARTICIPANTS

A.S.D.GOVT. DEGREE COLLEGE FOR WOMEN (A) DEPARTMENT OF Botany, Home Science, Zoology & Microbiology

One - Day National Workshop on

"The Curious World of Algae- Exploring Biological Applications 4th JULY 2024

S.No.	Name of the Participant DrMrs/Ms	Name of the College
1.	Dr. M.Suvarchala	Vice principal,A.S.D Govt. Degree College for Women (A), Kakinada
2.	M.Vasantha Lakshmi	Lecturer Incharge of Zoology A.S.D Govt. Degree College for Women (A) Kakinada
3.	Dr.k.Lavanya	Lecturer in Homescience A.S.D Govt. Degree College for Women (A), Kakinada
4.	Dr. GAnitha	Lecturer in Homescience A.S.D Govt. Degree College for Women (A), Kakinada
5.	D.Jayasree	Lecturer incharge of Microbiology A.S.D Govt. Degree College for Women (A), Kakinada
6.	K.N.V.S.N.Eswari	Lecturer Incharge of Botany & Horticulture A.S.D Govt. Degree College for Women (A), Kakinada
7.	Dr.M.Sulakshana	Lecturer in Botany A.S.D Govt. Degree College for Women (A), Kakinada
8.	S.Madhavi	Lecturer in Zoology A.S.D Govt. Degree College for Women (A), Kakinada
9.	L. Malleswari	Lecturer in Homescience A.S.D Govt. Degree College for Women (A), Kakinada
10.	N.Pushpa	Lecturer in Botany A.S.D Govt. Degree College for Women (A), Kakinada
11.	R.Venkata sandhya	Lecturer in Zoology & Aquaculture A.S.D Govt. Degree College for Women (A),

LIST OF PARTICIPANTS

		Kakinada
12	C. Lakahmi Chandini	Lasturar in Datany & Hartigultura
12.		A S D Court Dograd College for Women
		A.S.D Govi. Degree Conege for women
		(A), Valvinada
12		
13.	. V.Bhavani	II B.Sc.Botany (Honours) A.S.D Govt.
	~ ~1	Degree College for Women (A),
14.	. S.Sharon	III BSc CZAqT A.S.D Govt. Degree
		College for Women (A),
15.	. P. Bhuvaneswari	III BSc CZAqT A.S.D Govt. Degree
		College for Women (A),
16	. K. Aswini	III BSc CZAqT A.S.D Govt. Degree
		College for Women (A), Kakinada
17	. K. lakshmi pallavi	III BSc CZAqT A.S.D Govt. Degree
		College for Women (A).
18	Ch Srivalli	III BSc CZAgT A S D Govt Degree
		College for Women (A)
10	K Bala ranjini	III BSc CZAaT A S D Govt Degree
17		College for Women (A)
		III PSo CP7 A S D Cout Dograo Collago
20	P. Lehva Sri	for Women (A)
201		$\frac{10r \text{ women (A)}}{110r \text{ women (A)}}$
21.	. V. Satya Veni	II BSc Zoology (Honours) A.S.D Govt.
		Degree College for Women (A),
22.	. M. Manasa	II BSc Zoology (Honours) A.S.D Govt.
		Degree College for Women (A),
23.	. M. Navya	II BSc Zoology (Honours) A.S.D Govt.
		Degree College for Women (A),
24.	. M. Soundaryavathi	II BSc Zoology (Honours) A.S.D Govt.
		Degree College for Women (A),
25.	. K. Jubeda	II BSc Zoology (Honours) A.S.D Govt.
		Degree College for Women (A),
26	. K.Sri Veera Pravallika	II BSc Zoology (Honours) A.S.D Govt.
		Degree College for Women (A).
27	O. Ramva Sri	II BSc Zoology (Honours) A S D Govt
		Degree College for Women (A)
		II BSc Zoology (Honours) A S D Govt
20		Degree College for Women (A)
28.	. В. Lakshmi Alekya	Degree Conege for women (A),
		UDSo Zoology (Use over) A C D Ct
29	A Pravallika	II DSC Loology (Honours) A.S.D GOVI.
		Degree College for women (A),
30	. B. Ishika	II BSc Zoology (Honours) A.S.D Govt.
		Degree College for Women (A),
31.	. G. Naga Mahalakshmi	III BSc CBZ (2021-2024) A.S.D Govt.
		Degree College for Women (A),
32.	. O. Guna sri	III BSc CBZ (2020-2023) A.S.D Govt.
		Degree College for Women (A),
_		III BSc CBZ (2020-2023) A.S.D Govt.
33.	. K. Ramya	Degree College for Women (A)
	-	III BSc CBZ (2020-2023) A S D Govt
34.	. K. Kavya sri	Degree College for Women (A)
	J	Degree Conege for Women (A),

35.	G.Supriya	II B.Sc.Botany (Honours) A.S.D Govt. Degree College for Women (A),
36.	P.Daakshayani	II B.Sc.Botany (Honours) A.S.D Govt. Degree College for Women (A),
37.	S.Jayanthi	II B.Sc.Botany (Honours) A.S.D Govt. Degree College for Women (A),

38. D.B.D.HimaMala II B.Sc.Botany (Honours) A.S.D Go 39 P.P.L.Prasanna II B.Sc.Botany (Honours) A.S.D Go 40. D.Divyakalyani II B.Sc.Botany (Honours) A.S.D Go 41. Sk.Abedu II B.Sc.Botany (Honours) A.S.D Go 42. K.Nagalakshmi II B.Sc.Cota A.S.D Govt. Degree 43. S.Rajakumari III B.Sc.Chata.S.D Govt. Degree 44. K.Purnima Veeramani III B.Sc.CBH A.S.D Govt. Degree 45. D.Hindu III B.Sc.CBH A.S.D Govt. Degree 46. P.Divya Durga Sri III B.Sc.CBA A.S.D Govt. Degree 47. T.Keerthika III B.Sc.Cbz A.S.D Govt. Degree 48. K.Swetha III B.Sc.Cbz A.S.D Govt. Degree 48. K.Swetha III B.Sc.Cbz A.S.D Govt. Degree 49 G.Nagamahalakshmi III B.Sc.Cbz A.S.D Govt. Degree 49 G.Nagamahalakshmi III B.Sc.Cbz A.S.D Govt. Degree 51. K.Ramya III B.Sc.Cbz A.S.D Govt. Degree 53. P.Lehya sri III B.Sc.Cbz A.S.D Govt. Degree 53. P.Lehya sri III B.Sc.Cbz A.S.D Govt. Degree 54. S.Lohitha III B.Sc.Botany (Honours) A.S.D Go			
39 P.P.L.Prasanna IIB.Sc.Botany (Honours) A.S.D Go 40. D.Divyakalyani IIB.Sc.Botany (Honours) A.S.D Go 41. Sk.Abedu IIB.Sc.Botany (Honours) A.S.D Go 41. Sk.Abedu IIB.Sc.Botany (Honours) A.S.D Go 42. K.Nagalakshmi College for Women (A), 43. S.Rajakumari III B.Sc.Cbz A.S.D Govt. Degree 44. K.Purnima Veeramani III B.Sc. CBHt A.S.D Govt. Degree 45. D.Hindu III B.Sc. Cbz A.S.D Govt. Degree 46. P.Divya Durga Sri III B.Sc.Cbz A.S.D Govt. Degree 60lege for Women (A), College for Women (A), 47. T.Keerthika III B.Sc.Cbz A.S.D Govt. Degree 61. P.Divya Durga Sri III B.Sc.Cbz A.S.D Govt. Degree 62llege for Women (A), III B.Sc.Cbz A.S.D Govt. Degree 64. P.Divya Durga Sri III B.Sc.Cbz A.S.D Govt. Degree 63. G.Nagamahalakshmi III B.Sc.Cbz A.S.D Govt. Degree 64. K.Swetha III B.Sc.Cbz A.S.D Govt. Degree 65. Ollege for Women (A), E 75. U.Bhagyalakshmi III B.Sc.Cbz A.S.D Govt. Degree 76. <	38.	D.B.D.HimaMala	II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A).
40. D.Divyakalyani II B.Sc. Botany (Honours) A.S.D Go Degree College for Women (A), 41. Sk.Abedu III B.Sc. Botany (Honours) A.S.D Go 42. K.Nagalakshmi III B.Sc. Cbr A.S.D Govt. Degree College for Women (A), 43 S.Rajakumari III B.Sc. CBH A.S.D Govt. Degree College for Women (A), 44. K.Purnima Veeramani III B.Sc. CBH A.S.D Govt. Degree College for Women (A), 45. D.Hindu III B.Sc. CDS A.S.D Govt. Degree College for Women (A), 46. P.Divya Durga Sri III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 47. T.Keerthika III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 48. K.Swetha III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 49 G.Nagamahalakshmi III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 50 U.Bhagyalakshmi III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 51. K.Ramya III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 52. Y.SriSai Durga III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 53. P.Lehya sri III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 54. S.Lohitha II B.Sc. Botany (Honours) A.S.D Gov	39	P.P.L.Prasanna	II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A),
41. Sk.Abedu II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 42. K.Nagalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 43 S.Rajakumari III B.Sc.CBHt A.S.D Govt. Degree College for Women (A), 44. K.Purnima Veeramani III B.Sc.CBHt A.S.D Govt. Degree College for Women (A), 45. D.Hindu III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 46. P.Divya Durga Sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 47. T.Keerthika III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 48. K.Swetha III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 49. G.Nagamahalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 50. U.Bhagyalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 51. K.Ramya III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 52. Y.SriSai Durga III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 53. P.Lehya sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 54. S.Lohitha II B.Sc.Botany (Honours) A.S.D Go 55. M.Lakshmi II B.Sc.Botany (Honours) A.S.D Go 56.	40.	D.Divyakalyani	II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A),
42. K.Nagalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 43 S.Rajakumari III B.Sc.CBHt A.S.D Govt. Degree College for Women (A), 44. K.Purnima Veeramani III B.Sc.CBHt A.S.D Govt. Degree College for Women (A), 45. D.Hindu III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 46. P.Divya Durga Sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 47. T.Keerthika III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 48. K.Swetha III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 49 G.Nagamahalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 50 U.Bhagyalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 51. K.Ramya III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 52. Y.SriSai Durga III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 53. P.Lehya sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 54. S.Lohitha II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A), 55. M.Lakshmi II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A), 56. T.Sahithi II B.Sc.Homescience A.S.D Govt.	41.	Sk.Abedu	II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A),
43 S.Rajakumari III B.Sc. CBHt A.S.D Govt. Degree College for Women (A), 44. K.Purnima Veeramani III B.Sc. CBHt A.S.D Govt. Degree College for Women (A), 45. D.Hindu III B.Sc. CBHt A.S.D Govt. Degree College for Women (A), 46. P.Divya Durga Sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 47. T.Keerthika III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 47. T.Keerthika III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 48. K.Swetha III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 50 U.Bhagyalakshmi III B.Sc.CBH A.S.D Govt. Degree College for Women (A), 51. K.Ramya III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 52. Y.SriSai Durga III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 53. P.Lehya sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 54. S.Lohitha IB B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A), 55. M.Lakshmi II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A), 56. T.Sahithi II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A), 57. N.Anjali II B.Sc.Homescience A.S.D Govt. </td <td>42.</td> <td>K.Nagalakshmi</td> <td>III B.Sc.Cbz A.S.D Govt. Degree College for Women (A),</td>	42.	K.Nagalakshmi	III B.Sc.Cbz A.S.D Govt. Degree College for Women (A),
 K.Purnima Veeramani III B.Sc. CBHt A.S.D Govt. Degree College for Women (A), D.Hindu III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), P.Divya Durga Sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), T.Keerthika III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), K.Swetha III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), S. Swetha III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), S. Cby A.S.D Govt. Degree College for Women (A), S. Swetha III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), S. U.Bhagyalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), K.Ramya III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), K.Ramya III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), S. Y.SriSai Durga III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), S.Lohitha II B.Sc.Cbz A.S.D Govt. Degree College for Women (A), S.Lohitha II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A), M.Lakshmi II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A), M.Lakshmi II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A), M.Lakshmi II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A), M.Srija III B.Sc.Homescience A.S.D Govt. Degree College for Women (A), B.Sc.Homescience A.S.D Govt. Degree College for Women (A), P.Pavani II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), P.Srija III B.Sc.Homescience A.S.D Govt. Degree College for Women (A), P.Srija III B.Sc.Homescience A.S.D Govt. Degree College for Women (A), P.Srija III B.Sc.Homescience A.S.D Govt. Degree College for Women (A), P.Srija III B.Sc.Homescience A.S.D Govt. Degree College for Women (A), B.Sc.Homescience A.S.D Govt.	43	S.Rajakumari	III B.Sc.CBHt A.S.D Govt. Degree College for Women (A),
45. D.Hindu III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 46. P.Divya Durga Sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 47. T.Keerthika III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 48. K.Swetha III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 49. G.Nagamahalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 50. U.Bhagyalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 51. K.Ramya III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 52. Y.SriSai Durga III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 53. P.Lehya sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 54. S.Lohitha II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A), 55. M.Lakshmi II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 56. T.Sahithi II B.Sc.Homescience A.S.D Govt. 57. N.Anjali II B.Sc.Homescience A.S.D Govt. 58. K.Shravya Kumari II B.Sc.Homescience A.S.D Govt. 59 M.Srija Degree College for Women (A), 59 M.Srija Degree College for Women	44.	K.Purnima Veeramani	III B.Sc. CBHt A.S.D Govt. Degree College for Women (A),
46. P.Divya Durga Sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 47. T.Keerthika III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 48. K.Swetha III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 49 G.Nagamahalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 50 U.Bhagyalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 51. K.Ramya III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 52. Y.SriSai Durga III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 53. P.Lehya sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 54. S.Lohitha II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A), 55. M.Lakshmi II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 56. T.Sahithi II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 57. N.Anjali II B.Sc.Homescience A.S.D Govt. 58. K.Shravya Kumari II B.Sc.Homescience A.S.D Govt. 59 M.Srija Degree College for Women (A), 60. P.Pavani II B.Sc.Homescience A.S.D Govt. 62. T.Divya Jyothi II B.Sc.H	45.	D.Hindu	III B.Sc.Cbz A.S.D Govt. Degree College for Women (A),
 47. T.Keerthika III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 48. K.Swetha III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 49 G.Nagamahalakshmi III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 50 U.Bhagyalakshmi III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 51. K.Ramya III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 52. Y.SriSai Durga III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 53. P.Lehya sri III B.Sc. Cbz A.S.D Govt. Degree College for Women (A), 54. S.Lohitha II B.Sc. Botany (Honours) A.S.D Go 55. M.Lakshmi II B.Sc. Botany (Honours) A.S.D Go 56. T.Sahithi II B.Sc. Botany (Honours) A.S.D Go 57. N.Anjali III B.Sc. Homescience A.S.D Govt. Degree College for Women (A), 58. K.Shravya Kumari II B.Sc. Homescience A.S.D Govt. 59 M.Srija III B.Sc. Homescience A.S.D Govt. 60. P.Pavani III B.Sc. Homescience A.S.D Govt. 61. P.Srija III B.Sc. Homescience A.S.D Govt. 62. T.Divya Jyothi II B.Sc. Homescience A.S.D Govt. 63. P.Sravani Chandrika II B.Sc. Homescience A.S.D Govt. 64. V.Janaki III B.Sc. Homescience A.S.D Govt. 65. B.Rajeswari III B.Sc. Homescience A.S.D Govt. 	46.	P.Divya Durga Sri	III B.Sc.Cbz A.S.D Govt. Degree College for Women (A),
48. K.Swetha III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 49 G.Nagamahalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 50 U.Bhagyalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 51. K.Ramya III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 52. Y.SriSai Durga III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 53. P.Lehya sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 54. S.Lohitha II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 55. M.Lakshmi II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 56. T.Sahithi II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 57. N.Anjali II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 58. K.Shravya Kumari II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 59 M.Srija II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 60. P.Pavani II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 61. P.Srija II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 62. T.Divya Jyothi II B.Sc.Homescience A.S.	47.	T.Keerthika	III B.Sc.Cbz A.S.D Govt. Degree College for Women (A),
49 G.Nagamahalakshmi III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 50 U.Bhagyalakshmi III B.Sc.Cbt A.S.D Govt. Degree College for Women (A), 51. K.Ramya III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 52. Y.SriSai Durga III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 53. P.Lehya sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 54. S.Lohitha II B.Sc.Botany (Honours) A.S.D Govt. 55. M.Lakshmi II B.Sc.Botany (Honours) A.S.D Govt. 56. T.Sahithi II B.Sc.Botany (Honours) A.S.D Govt. 57. N.Anjali II B.Sc.Botany (Honours) A.S.D Govt. 58. K.Shravya Kumari II B.Sc.Homescience A.S.D Govt. 59 M.Srija II B.Sc.Homescience A.S.D Govt. 59 M.Srija II B.Sc.Homescience A.S.D Govt. 50. P.Pavani II B.Sc.Homescience A.S.D Govt. 51. P.Srija II B.Sc.Homescience A.S.D Govt. 59 M.Srija Degree College for Women (A), 61. P.Srija II B.Sc.Homescience A.S.D Govt. 53. P.Sravani Chandrika II B.Sc.Homescience A.S.D Govt.	48.	K.Swetha	III B.Sc.Cbz A.S.D Govt. Degree College for Women (A),
50 U.Bhagyalakshmi III B.Sc. CBHt A.S.D Govt. Degree College for Women (A), 51. K.Ramya III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 52. Y.SriSai Durga III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 53. P.Lehya sri III B.Sc.Cbz A.S.D Govt. Degree College for Women (A), 54. S.Lohitha II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 55. M.Lakshmi II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 56. T.Sahithi II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 57. N.Anjali II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 58. K.Shravya Kumari II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 59 M.Srija II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 60. P.Pavani II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 61. P.Srija II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 62. T.Divya Jyothi II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 63. P.Sravani Chandrika II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 64. V.Janaki IIB	49	G.Nagamahalakshmi	III B.Sc.Cbz A.S.D Govt. Degree College for Women (A),
51.K.RamyaIII B.Sc.Cbz A.S.D Govt. Degree College for Women (A),52.Y.SriSai DurgaIII B.Sc.Cbz A.S.D Govt. Degree College for Women (A),53.P.Lehya sriIII B.Sc.Cbz A.S.D Govt. Degree College for Women (A),54.S.LohithaII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),55.M.LakshmiII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),56.T.SahithiII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),57.N.AnjaliII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),58.K.Shravya KumariII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),59M.SrijaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),60.P.PavaniII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),61.P.SrijaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),62.T.Divya JyothiII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),63.P.Sravani ChandrikaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),64.V.JanakiII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),65.B.RajeswariII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),	50	U.Bhagyalakshmi	III B.Sc. CBHt A.S.D Govt. Degree College for Women (A),
52.Y.SriSai DurgaIII B.Sc.Cbz A.S.D Govt. Degree College for Women (A),53.P.Lehya sriIII B.Sc.Cbz A.S.D Govt. Degree College for Women (A),54.S.LohithaII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),55.M.LakshmiII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),56.T.SahithiII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),57.N.AnjaliII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),58.K.Shravya KumariII B.Sc.Botany (Honours) A.S.D Govt. Degree College for Women (A),59M.SrijaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),60.P.PavaniII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),61.P.SrijaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),62.T.Divya JyothiII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),63.P.Sravani ChandrikaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),64.V.JanakiII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),65.B.RajeswariII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),	51.	K.Ramya	III B.Sc.Cbz A.S.D Govt. Degree College for Women (A),
53.P.Lehya sriIII B.Sc.Cbz A.S.D Govt. Degree College for Women (A),54.S.LohithaII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),55.M.LakshmiII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),56.T.SahithiII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),57.N.AnjaliII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),58.K.Shravya KumariII B.Sc.Botany (Honours) A.S.D Govt. Degree College for Women (A),59M.SrijaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),60.P.PavaniII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),61.P.SrijaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),62.T.Divya JyothiII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),63.P.Sravani ChandrikaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),64.V.JanakiII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),65.B.RajeswariII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),	52.	Y.SriSai Durga	III B.Sc.Cbz A.S.D Govt. Degree College for Women (A),
54.S.LohithaII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),55.M.LakshmiII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),56.T.SahithiII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),57.N.AnjaliII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),58.K.Shravya KumariII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),59M.SrijaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),60.P.PavaniII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),61.P.SrijaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),62.T.Divya JyothiII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),63.P.Sravani ChandrikaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),64.V.JanakiIB.Sc.Homescience A.S.D Govt. Degree College for Women (A),65.B.RajeswariII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),	53.	P.Lehya sri	III B.Sc.Cbz A.S.D Govt. Degree College for Women (A),
55.M.LakshmiII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),56.T.SahithiII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),57.N.AnjaliII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),58.K.Shravya KumariII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),59M.SrijaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),60.P.PavaniII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),61.P.SrijaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),62.T.Divya JyothiII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),63.P.Sravani ChandrikaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),64.V.JanakiDegree College for Women (A), II B.Sc.Homescience A.S.D Govt. Degree College for Women (A),65.B.RajeswariII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),	54.	S.Lohitha	II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A),
 56. T.Sahithi II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 57. N.Anjali II B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A), 58. K.Shravya Kumari II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 59 M.Srija Degree College for Women (A), 60. P.Pavani II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 61. P.Srija II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 62. T.Divya Jyothi II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 63. P.Sravani Chandrika II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 64. V.Janaki II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 65. B.Rajeswari II B.Sc.Homescience A.S.D Govt. Degree College for Women (A), 	55.	M.Lakshmi	II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A),
57.N.AnjaliII B.Sc.Botany (Honours) A.S.D Go Degree College for Women (A),58.K.Shravya KumariII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),59M.SrijaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),60.P.PavaniII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),61.P.SrijaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),62.T.Divya JyothiII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),63.P.Sravani ChandrikaII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),64.V.JanakiII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),65.B.RajeswariII B.Sc.Homescience A.S.D Govt. Degree College for Women (A),	56.	T.Sahithi	II B.Sc.Botany (Honours) A.S.D Gov Degree College for Women (A),
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65. B.Rajeswari II B.Sc.Homescience A.S.D Govt. Degree College for Women (A)	64.	V.Janaki	II B.Sc.Homescience A.S.D Govt. Degree College for Women (A),
	65.	B.Rajeswari	II B.Sc.Homescience A.S.D Govt. Degree College for Women (A),

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00.	S.mazeermisna	Degree College for Women (A)
67.	P.Saniana	II B.Sc.Homescience A.S.D Govt.
		Degree College for Women (A),
68.	D.Usha	II B.Sc.Homescience A.S.D Govt.
		Degree College for Women (A),
69.	T.Meghana	II B.Sc.Homescience A.S.D Govt.
70	K Anushkha	U B Sc Homescience, A S D Covt
/0.	K.Aliuslikila	Degree College for Women (A)
71.	P.Venkata Durga bhavani	II B.Sc.Homescience A.S.D Govt.
	6	Degree College for Women (A),
72	Ch Swiethe	II B.Sc.Homescience A.S.D Govt.
12	Cn.Sujaina	Degree College for Women (A),
73	M Devika	II B.Sc.Homescience A.S.D Govt.
15.		Degree College for Women (A),
74.	K.Naga Abhinaya	II B.Sc. Homescience A.S.D Govi.
		II B Sc Homescience & S D Govt
75	G.Poorna Mahalakshmi	Degree College for Women (A)
		II B.Sc. Homescience A.S.D.Govt
76	B.Anusha	Degree College for Women (A),
		II B.Sc.Homescience A.S.D Govt.
	K.Madhuri	Degree College for Women (A),
70	V. Sandhara	II B.Sc.Homescience A.S.D Govt.
/8	K.Sandnya	Degree College for Women (A),
70	Ch Rudramahalakshmi	III B.Sc. (CBMB) A.S.D Govt. Degree
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80	V.Durga Bhavani	III B.Sc. (CBMB) A.S.D Govt. Degree
		III B Sc (CBMB) A S D Govt Degree
81	M.Rani	College for Women (A).
82	A.Lakshmi	III B.Sc. (CBMB) A.S.D Govt. Degree
		College for Women (A),
83	R.Madhu	III B.Sc. (CBMB) A.S.D Govt. Degree
		College for Women (A),
84.	J.Hemalatha	III B.SC. (UBIVIB) A.S.D GOVI. Degree
		$\begin{array}{c} \text{UII B Sc} (CBMR) \land S D Govt Degree \end{array}$
85	P.Bhavani	College for Women (A).
		III B.Sc. (CBMB) A.S.D Govt. Degree
86	P.Susma	College for Women (A),
07	D Karana a	III B.Sc. (CBMB) A.S.D Govt. Degree
87.	r.Kusuma	College for Women (A),
88	B Parimala Pushna	III B.Sc. (CBMB) A.S.D Govt. Degree
00.		College for Women (A),
89	P.Ganga Bhavani	III B.SC. (CBMB) A.S.D Govt. Degree
		III B Sc CBHt A S D Govt Degree
90	T.Manga	College for Women (A)
		III B Sc. CBHt A S D Govt Degree
91	K.Veera Veni	College for Women (A)
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93	G.Akshaya	III B.Sc. CBHt A.S.D Govt. Degree College for Women (A),
94	K.Saranya	III B.Sc. CBHt A.S.D Govt. Degree College for Women (A),
95	I.Srilakshmi	III B.Sc. CBHt A.S.D Govt. Degree College for Women (A),
96	K.Anusha	III B.Sc. CBHt A.S.D Govt. Degree College for Women (A),
97	Y.SriSai Ishwaryambika	III B.Sc. CBHt A.S.D Govt. Degree College for Women (A),
98	E.Chadrakala	III B.Sc. CBHt A.S.D Govt. Degree College for Women (A),
99	K.Navya	II B.Sc.Botany (Honours) A.S.D Govt. Degree College for Women (A),
100	P.Neha	II B.Sc.Botany (Honours) A.S.D Govt. Degree College for Women (A),


INAUGURAL SESSION

On 4.07.2024,One Day National Workshop started with the Inaugural session and all the distinguished guests, the president of the event, Dr.V.Anantha Lakshmi,Principal, A.S.D. Govt.Degree College for Women(A), Kakinada Vice president Dr.M.Suvarchala,Vice-principal of the college,the chief guest of the session, Dr.J.V.Sudhakar Assistant Professor, Dr.SRK Govt Arts College, Yanam, IQAC Coordinator Ms.M.Vasantha Lakshmi,Incharge of Zoology Department,Convener of National Workshop Ms.K.N.V.S.N.Eswari, Incharge of Botany,Organizing Secretary ,Ms.D.Jayasree . Incharge of Dept of Microbiology, are invited to the dias .The inaugural session started with the prayer song by the II year Botany Major students of ASD Govt Degree College for Vomen . (A),Kakinada, followed by the presentation of saplings to the distinguished guests on he dias . and the faculty of ASD Govt Degree College for Women (A),Kakinada by the tudents



Ms.K.Dakshayani ,II Botany Major Welcoming the Principal. Dr.V.Anantha Lakshmi With Sapling



Ms.K.Bhavani ,II Botany Major Welcoming the Vice Principal Dr.M. Suvarchala with Sapling



Ms,K,Dakshyani II Botany MajorWelcoming the Resource Person Dr..J.V.Sudhakar



Prayer Song by Students



Lightening the Lamp by Resource Person Dr.J.V.Sudhakar



Dignitaries on the Dias along with the Resource Person



The president of the function, Dr.V.Anantha Lakshmi, principal of this college, gave her opening remarks and congratulated all the Science Departments for their efforts on Organizing one day National Workshop on "Curious world of Algae Exploring Biological Applications"



The Vice-Principal of the college Ms. M.Suvarchala, explaining the

Nutritive aspects of Algae



Greetings by IQAC Cordinator Mrs. M.Vasantha Lakshmi

<u>Technical Session -I (Collection, Preservation and Nutritive values of Algae)</u>

Dr.J.V.Sudhakar Assistant Professor, Dr.SRK Govt Arts College, Yanam, acted as the Resource Person for the first session of the program.,The resource person highlighted the significance of Collection, Preservation and Nutritional values of Various algal species and provided hands on training to the participants about the preservation of Algal specimens



Ms.S.Madhavi, Lecturer in Zoology introducing the Resource person



Resource Person Dr.J.V.Sudhakar delivering talk in Technical session -I



Resource Person explaining about the beneficial aspects of algae



Collection of Algal Samples by Resource Person

Algae, members of a group of predominantly aquatic photosynthetic organisms

of the kingdom <u>Protista</u>. Algae have many types of <u>life cycles</u>, and they range in size from microscopic *Micromonas* <u>species</u> to giant <u>kelps</u> that reach 60 metres (200 feet) in length.

Algal Collection :

Purpose

For many species of algae, identification in the field is impossible. Collecting, fixing and processing algal samples during quantitative or qualitative assessments provide fresh or preserved specimens for laboratory identification and pressed herbarium samples provide voucher specimens for permanent records. Voucher specimens serve as documentation species lists/collections and provide evidence for species identification.

Materials required :

Ziplock bags or plastic vials or containers Scraper (chisel, small knife, etc.) Permanent ink pen Waterproof paper Mesh or cloth bag cooler or covered bucket It is important to clearly separate and identify the algae taken from different habitats and/or sites. Mark ziplock bags or vials with date, depth and location, or cut small pieces of waterproof paper to use as labels to be inserted into storage containers.

Method

Prior to collecting, mark ziplock bags, vials or containers with date, depth, and location.

Use a mesh or cloth bag to carry the chisel or knife and marked bags or vials in the field.

If possible, collect an entire specimen by carefully removing the holdfast from the substrate with fingers, or knife. The complete plant, holdfast, rhizoids, and reproductive structures are crucial to proper

identification of algae. If the specimen is extremely large, take only a representative portion. .

Gently place the specimen in the bag or vials with sufficient seawater. then store samples in

dark cooler orcovered container with ice. Fix or process as soon as possible to

avoid tissue degradation/decomposition

Fixation:

Fixation is the preservation of specimens in a chemical solution to stop the deterioration of tissues. Processing is the handling, sorting and mounting of the specimens on herbarium paper. Fresh or preserving specimens in liquid are best for identification and pressed algae are permanent voucher specimens.

<u>Materials required :</u>

Buckets, trays, bowls glass jars and vials tweezers permanent ink pen labels or waterproof paper Formalin protective gloves

<u>Method</u>

If specimens cannot be immediately processed, fixing and storing the samples away from direct sunlight inhibits tissue deterioration and bleaching. A common method of fixation is to preserve the algal samples in a 4% Formalin-seawater solution (commercial 37% Formal dehyde = 100%) in glass jars or vials out of the light.

The Formalin solution can be prepared ahead of time. Prepare a label or piece of waterproof paper with the date, time and location of collection. Immerse the algae in the Formalin solution in a glass jar or vial and affix label or put waterproof paper inside with algae. The algae should be completely immersed in the Formalin solution for at least 48 hours Algae may be kept in the solution for longer periods of time (up to 1 to 2 months) if kept out of direct light. Light and fixative solutions will cause pigments to bleach.

Formalin Solution

Commercial 37% formaldehyde (= 100% Formalin) is diluted with seawater to make a 4% Formalin solution and buffered with borax or baking soda (sodium bicarbonate) to prevent unfavorable increases in acidity. Use approximately 40 gm (2.75 tablespoons) of baking soda per litre of solution.

Alcohol Solution

Samples can be preserved in a 50% ethyl alcohol (or even rubbing alcohol) solution, but it is not recommended. Algal material will lose pigments and become very brittle quickly. Note: Be cautious with the buffer. Too much buffer may cause the thalli to become brittle and disintegrate.

Handling & Pressing:

Handling and Sorting <u>Materials</u>

Buckets, trays, bowls, glass bottles and vials tweezers permanent ink pen labels or waterproof paper protective gloves

If samples are to be sent off for identification and processing, prepare specimens

for transport per instructions of receiving laboratory. If preparing specimens for pressing, if fixed remove from fixative and rinse in tap water. Remove any sand or debris that is not part of the specimen. Separate samples into workable groups that may be grouped on herbarium sheets, such as large and small specimens, samples from same habitat, or taxonomic groups (greens, reds, browns), etc. Carefully track samples with labels and notes for proper records.

Pressing Algal Specimens <u>Materials:</u>

Plant press or two boards and weights cardboard ventilators drying blotters or newspapers herbarium paper wax paper tweezers and small paint brushes paper towels tray or cookie sheet larger than herbarium paper

Method :

(

To facilitate sample tracking, use a numbering system where each specimen has an unique number. Note specimen information on lower right hand corner of the herbarium sheet before pressing specimen. If specimens are only for private vouchers, more than one sample may be put on an herbarium sheet to save on materials.

Museum herbaria require one specimen per sheet.

Larger, coarser specimens may be laid directly on an herbarium sheet on a flat surface. Spread out branches and holdfast/rhizoids in one plane with tweezers or wet paintbrush. If the holdfast is too thick, remove a portion to ease pressing. For more delicate specimens, place the herbarium sheet on top of a piece of plastic, cloth, grid, etc. the size of the herbarium paper and submerge in a tray 75% filled with water. Floating the specimen in the water, arrange specimen over the herbarium sheet with brushes and tweezers. Slowly raise the base piece with the herbarium sheet and specimen out of the tray and allow to drain. Place herbarium sheet and specimen on dry blotter or newspaper that lies on a cardboard ventilator and cover specimen with sheet of wax paper.

Place another blotter layer over the wax paper, top with another cardboard ventilator, and put in plant press. Continue adding specimens to the plant press so that each specimen is covered with wax paper between a layer of blotters, enclosed by a layer of ventilators. Firmly tightenthe straps of the plant press.for 12-18 hours

Later replace wax paper and blottersor newspaper (all materials can be dried and reused indefinitely). Reexamine after 24 hours and again replace blotters if needed. Place in dry, well ventilated area. Depending on thickness and water content, specimens

may dry in 1 to 10 days. Remove and store herbarium specimens in well ventilated area



The Resource Person Dr.J.V.Sudhakar giving Hands on Training to the participants on Preservation of Algal Specimens





Participants in One Day National Workshop





Felicitation of Resource Person of Technical Session-I, Dr. J.V.Sudhakar by organizing Committee of National workshop



Vote of thanks to Resource person of Technical Session-1 by Dr. M. Sulakshana Lecturer in Botany

TECHNICAL SESSION-2:



Ms. S. Jayanthi , II Botany Major greeting the Resource person Prof. Felix Bast



Dignitaries along with the Resource person Prof. Felix Bast on the Dias



Ms. D.Jayasree. Lecturer Incharge of Microbiology introducing the Resource Person

of Technical session- II



Prof. Felix Bast Delivering Lecture

In Technical Session- II, The resource person explained about the incredible potential of many Algal species.

Stromatolites:

<u>Stromatolites</u> are internally laminated organo sedimentary structures, evolved from microbial mats over time. The ancient <u>stromatolites</u> are considered to be the only form of life for longer periods in the earth's history. Probably as the first photosynthetic communities,

these stromatolites proliferated in the shallow zone of the oceans, with the consumption of CO_2 and production of O_2 and H_2 . The stromatolites of the Warra woona Group in Western Australia are about 3.43 billion year old

These mats have complex relationships with trophically-related bacterial groups and the physiologies of habitat-forming (edificatory) cyanobacteria.

Coccolithophores:

The coccolithophores are calcifying protists that have formed a significant part of the oceanic phytoplankton since the Jurassic. Their role in regulating the Earth system is considerable.

Through their secretion of a tiny composite exoskeleton the coccolithophores are estimated to be responsible for about half of *all* modern precipitation of CaCO₃, in the oceans Coccolithophores thus play a primary role in the global carbon cycle The ecological and biogeochemical impacts of their skeletons are multiple and act on a wide range of ecological to geological time scales.

On ecological time scales, coccolithophore biomineralization plays a major role in controlling the alkalinity and carbonate chemistry of the photic zone of the world ocean.

Counterintuitively, the precipitation of carbonate is a source of CO_2 for the upper ocean and atmosphere

On the other hand, the biogenic carbonate produced by coccolithophores constitutes an ideal material for aggregating with the huge reservoir of particulate organic carbon created by photosynthesis in the upper oceanic layers.

The accumulation of coccoliths into marine snow ballasts organic matter that otherwise would not sink to deep-oceanic layers and, potentially, to the deep seafloor.

According to Honjo *et al.*, coccoliths are the main driver of the open ocean organic carbon pump, which removes CO_2 from the atmosphere. In fact, the effect

of coccolith ballasting on atmospheric CO_2

Trentepohlia annulata:

Trentepohlia is a genus of filamentous chlorophyte green algae in the

family <u>Trentepohliaceae</u>, living free on terrestrial supports such as tree trunks and wet rocks or <u>symbiotically</u> in <u>lichens</u>.

The filaments of *Trentepohlia* have a strong orange colour (photograph at right) caused by the presence of large quantities of <u>carotenoid</u> pigments which mask the green of the <u>chlorophyll</u>.

Stromatolites



STEVE GSCHMEISSNERISCIENCE PHOTO LIBRARYSTIENCE Photo Library

Coccolithophores



Snow meltdown in Himalayas accelerate Nocticula algal blooms in Arabian sea.



SEVEN NEW SPICIES OF PLANTS DISCOVERED

7 species new to science Six new species of marine alga from Indian coastline One new species of moss from Antarctica Cladophora goensis Bast (Goa) Ulva paschima Bast: West Coast (Goa and KA) Ulva uniseriata Bast (WB and AP) Bryum bharatiense Bast (E. Antarctica) Acetabularia jalakanyakae Bast (AN) Hypnea indica Kundu & Bast (GJ) Hypnea bullata Kundu & Bast (TN)



Ulva paschima Bast





Gymnodinium:

Red tide, discoloration of sea <u>water</u> usually caused by <u>dinoflagellates</u>, during periodic blooms (or population increases). <u>Toxic</u> substances released by these organisms into the water may be lethal to fish and other marine life. Red tides occur worldwide in warm seas. Up to 50 million cells per litre (quart) of the species *Gymnodinium brevis* caused a red tide off the Florida coast in 1947 and turned the water from green to yellow to amber; thousands of fishes died. A red tide along the Northumberland coast in England in 1968 was the cause of the death of many sea birds.

Gonyaulax polyedra :

Similar red tides, caused by *Gonyaulax polyedra*, have occurred off the <u>California</u> and Portuguese coasts. Toxins released into the water are irritating to the human respiratory system; they may become <u>public health</u> problems at coastal resorts when breaking waves release the toxic substances into the air.

Monostroma kuroshiense Bast:

Monostroma kuroshiense, a green alga in the division <u>Chlorophyta</u>, is a green seaweed endemic to <u>Kuroshio Coast</u> of Japan. This high-value seaweed is called Hitoegusa or Hirohano in Japanese. Previously this algae was known in binomen *Monostroma latissimum*, but the latest scientific research based on multilocal phylogeny discovered that this is a new species.^[11] The algae is named after Kuroshio Current, naming is done by phycologist <u>Felix</u> <u>Bast</u> This algae is commercially cultivated in <u>East Asia</u> and <u>South America</u> for the edible product "hitoegusa-nori" or "hirohano-hitoegusa nori",

popular <u>sushi</u> wraps. *Monostroma* <u>oligosaccharides</u> with <u>degree of polymerization</u> 6 prepared by <u>agarase</u> digestion from *Monostroma nitidum* <u>polysaccharides</u> have been shown to be an effective prophylactic agent during <u>in vitro</u> and <u>in vivo</u> tests against <u>Japanese encephalitis</u> viral infection. The sulfated oligosaccharides from *Monostroma* seem to be promising candidates for further development as antiviral agents.^[2] The genus *Monostroma* is the most widely cultivated genus among green <u>seaweed</u>



BAST, F., KUBOTA, S. AND OKUDA, K. 2015. Phylogeographic Assessment of Panmictic Monostroma Species from Kuroshio Coast, Japan Reveals Sympatric Speciation. Journal of Applied Phycology

Cladophora goensis Bast

Cladophora goensis ia green algal seaweed commonly seen in Polish bays. The species have been identified majorly in the Indian Oceans, Pacific, and Atlantic.. The major portion of the earth is covered by water inhabited by different aquatic plants that have pharmaceutical value. Many research studies have identified novel phytochemicals with different pharmacological activities from this marine vegetation. Algae have been a potential source of pharmacological agents and nutrition for decades.

Cladophora species are widely distributed in both marine and freshwater ecosystems. The common name of this species is Mekong weed. These types of weeds placed under the Chlorophyta genus consist of 183 taxonomically identified species. This weed has been used for food as well as medicine in both dry and fresh forms. Many anticancer candidates were investigated, however, over the last few years, it has been thought that choosing targets based on how proteins contribute to the onset as well as the progression of cancer is crucial, making regulatory proteins significant targets for treatment. The well-known anticancer therapeutic targets are human epidermal growth factor receptor (EGFR) (4WRG), poly (ADP-ribose) polymerase-1 (4UND), human estrogen receptor (ER) alpha ligand-binding domain (3ERT), human peroxisome proliferator-activated receptor (PPAR) alpha ligand-binding domain (3VI8), and human topoisomerase (1EJ9).

Approximately 77% of instances of colorectal cancer (CRC) had overexpressed levels of the EGFR. It is well-recognized that EGFR has a role in the carcinogenetic processes of angiogenesis, cell motility, apoptosis, proliferation, and metastasis

Cladophora goensis sp. nov. (Cladophorales, Ulvophyceae), had been discovered from Vasco-da-Gamma, Goa, India. This species formed algal bloom of moderate intensity in the Bay of Mormugao, on the west coast of India.

The phytochemicals of methanolic extracts of *C. goensis* showed potential interactions with cancer-related proteins.

Pink/Watermelon Ice algae

Watermelon snow, also called snow algae, , is a phenomenon caused by *Chlamydomonas nivalis*, a species of green algae containing a secondary red carotenoid pigment (astaxanthin) in addition to chlorophyll. Unlike most species of fresh-water algae, this species appears to be cryophilic (cold-loving) and thrives in freezing water. This type of snow is common during the summer in alpine and coastal polar regions worldwide Snow algae dominates glacial biomass immediately after the onset of melting, and its pigmentation can significantly darken the surface of a glacier. This plays a substantial role in glacial melt.

Invasive algae

Invasive Algae Species acts as a Source of Secondary Metabolites and Biological Activities Numerous studies have demonstrated the biological properties of macroalgae extracts and compounds, including antioxidant, anti-inflammatory ,antithrombotic, anticoagulant and coagulant , antimicrobial and anticancer .

In *Asparagopsis armata*, the polysaccharides derived from sulfated galactans have shown strong antiviral effects against human immunodeficiency virus (HIV), inhibiting its reproduction



Pink/Watermelon Ice algae



Invasive algae





Agarophytes:

Gracilaria corticata:

Plants 10-12cm long, the thallus consists of bundles of flat and much divided blades with 2-3 mm broad segments; branching is dichotomous in young blades; in older plants numerous marginal projections line the edges of the segments in a pinnate fashion; they are ½-2 cm long; the colour of the plants vary from deep purple to grass green. It is widely distributed in Dwarka, Okha (Gujarat), Bombay, Malvan, Ratnagiri, (Maharashtra) Goa, Karwar. Honawar, Bhatkal (Karnataka). It can be used as an algae for production of food and animal feed

Grateloupia filicina :

The genus *Grateloupia* with 96 or so recorded species is the largest genus in the family Halymeniaceae. The plants are an excellent source of food and lambda carrageenan, having several commercial applications. The genus *Grateloupia* includes taxa with a wide variety of habits, ranging from finely pinnate (*Grateloupia filicina*), foliose (*Grateloupia turuturu* Yamada) to hollow tubular blades (*Grateloupia intestinalis*)

Algal symbiotic systems

Symbiotic algae behave as mutualistic, parasitic, or free-living organisms, depending on host and symbiont genotypes and environmental conditions.Organisms with algal symbionts are widely distributed among various taxonomic groups.

Picoplanktons

Picoplankton is the fraction of <u>plankton</u> composed by <u>cells</u> between 0.2 and 2 μ m that can be either prokaryotic and eukaryotic phototrophs and heterotrophs:

They are prevalent amongst microbial plankton communities of both freshwater and marine ecosystems. They have an important role in making up a significant portion of the total biomass of phytoplankton communities.

In general, plankton can be categorized on the basis of physiological, taxonomic, or dimensional characteristics. Subsequently, a generic classification of a plankton includes:

- Bacterioplankton
- <u>Phytoplankton</u>
- <u>Zooplankton</u>

However, there is a simpler scheme that categorizes plankton based on a logarithmic size scale:

- Macroplankton (200–2000 µm)
- Micro-plankton (20–200 μm)
- Nanoplankton (2–20 μm)

This was even further expanded to include picoplankton $(0.2-2 \ \mu m)$ and fem-toplankton $(0.02-0.2 \ \mu m)$, as well as net plankton, ultraplankton.

Overall, picoplankton play an essential role in oligotrophic dimicitc lakes because they are able to produce and then accordingly recycle dissolved organic matter (DOM) in a very efficient manner

Agarophytes

Gracilaria corticata



Grateloupia filicina



Algal symbiotic systems

Picoplanktons





Valedictory Session :

The valedictory session commenced with expressions of gratitude from the organizers, extending heartfelt thanks to the distinguished speakers, participants, and everyone who contributed to the success of the workshop. A brief report on the program was presented by Ms K.N.V.S.N.Eswari,, Convener of the Programme where She extended gratitude to the Resource Persons Dr.J.V.Sudhakar and Prof.Felix Bast whose expertise, knowledge sharing, and thought-provoking presentations have been instrumental in making the workshop a valuable learning experience for all participants.

Certificates of participation were distributed to the attendees, serving as tangible tokens of acknowledgment for their active engagement and enthusiastic involvement in the workshop. The valedictory session also provided an opportunity for participants to exchange contact information, and solidify the connections forged throughout the day.



Distribution of Participation Certificates to the Participants by Prof. Felix Bast



Felicitation of the Resource Person Prof. Felix Bast



Ms.K.N.V.S.N.Eswari, Lecturer in charge of Botany proposing Vote of Thanks at the end of Programme

The organizers then opened the floor for participants to share their thoughts and feedback on the workshop. Attendees eagerly took this chance to express their appreciation for the diverse and enriching sessions, the expertise of the speakers, and the valuable insights gained. Constructive feedback was also welcomed, providing valuable input for future workshops and events

In

V. Annta Jall

Convenor

Principal

FEEDBACK COLLECTED

The Feedback was collected through Google Form. Sample of Feedback collected is given below

> National Workshop on " The Curious World of Algae : Exploring Biological Applications"

Date: 04 JULY

2024

Time: 10.00AM to 5.00PM

Department of

Botany, Zoology, Microbiology & Home science

Your email was recorded when you submitted this form.

sridevireddi127@gmail.com Switch accounts

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Name of the College & Place *

A.S.D Govt. Degree College for Women (A),

Name of the State *

Andhra Pradesh

Mobile No.(Whatsapp)

7386519981

Name of the Resource person I *



Dr. J.V. Sudhakar



Topic of the presentation I *



The curious world of Algae



Algae: Current trends & future applications

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SAMPLE CERTIFICATE

Ms. D. JAVASREE Ms. K.N.V.S.N. ESWARI Organizing Secretary Convenor	Kakinada, Andhra Pradesh on 04 ¹¹	organized by the Science Depar	One Day National Workshop on	of M B.SC	This is to certify that Dr/Mr/Ms	รู้ ออร ยังสูงกอ	A.S.D. GOVERI	
Ms. M. VASANTHA LAKSHMI Dr. M. SUVARCHALA IQAC Coordinator Vice-Principal	July 2024.	ments of A.S.D. Govt. Degree College for	"The Curious World of Algae : Exploring B	CZAQT has atten	ch. Srivalli	Certificate	NMENT DEGREE COLLEGE Re-Accredited by NAAC with 'B' Grade in Cycle Affiliated to Adikavi Nannaya University, Rajamahend	
V. Anautz J.J.L. Dr. V. ANANTHA LAKSHMI Principal		Women (Autonomous),	iological Applications"	nded and participated in			(W)(A), KAKINADA e III dravaram)	

NEWS PAPER COVERAGE

ACTIVITY COVERED IN EENADU NEWS PAPER

కళాశాలలో జాతీయ సదస్పు

సాంబమూర్తినగర్(కాకినాడ): అన్నవరం సత్యవతీదేవి ప్రభుత్వ మహిళా డిగ్రీ కళాశాలలో 'ది క్యూరియస్ వరల్డ్ ఆఫ్ ఆల్గీ ఎక్స్ఫోర్లరింగ్ బయాలాజికల్ అఫ్లికేషన్స్ అనే అంశంపై గురు వారం జాతీయ సదన్ను జరిగింది. ప్రిన్నిపల్ డాక్టర్ వి. అనంతలక్ష్మి అధ్యక్షతన జరిగిన ఈ సదస్సులో యానాం డాక్టర్ ఎస్ఆర్కే ఆర్ట్స్ కళా శాల బాటనీ హెడ్ డాక్టర్ జేవీ సుధాకర్ ముఖ్య అతిథిగా పాల్గొని మాట్లాడారు. అనంతరం విద్యా ర్థినులకు ద్రువపత్రాలు అందజేశారు.