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#### **CONTENTS**

Sl. No.	Name of the teacher	Title of the book/chapters published/ Title of the proceedings of the conference	Page No
1.	Dr. Jisha K .C.	Neurotransmitters in Plants Perspectives And Applications	6-9
2.	Dr.Muralikrishnan T.R.	Discourses in Applied Linguistics and English Language Teaching	10-12
3.	Dr. Amitha Bachan K.H.	AanakkuttiyumKattuplavum	13-14
4.	Dr.Sakkeena M .K.	Marjanu Allugha	15-18
5.	Dr.Sakkeena M.K.	Ecology of the new :Matter,Mind & Body	19-22
6.	Dr. Dhanya K	Ecologies of the new matter ,mind &body	23-25
7.	Dr Ranjith M	Bharathiy sahithy mem civil sainik sambandh	26-29
8.	Jasna NM	Ecologies of the new matter ,mind &body	30-32
9.	Chithra P	Gandhian Thoughts:Different Perspective	33-36
10.	Dr. Jisha K.C.	Bio-Episteme an anthology of research papers in science	37-40
11.	Dr. Amitha Bachan K.H.	Vezhambal Samrakshanathinate Randu Dashakangal	41-43
12.	Dr. Amitha Bachan K.H.	The Kid and the Hornbill	44
13.	Dr Amitha Bachan K.H.	Vezhambalum Thellivithum	45
14.	Dr Amitha Bachan K.H.	The historical linguist ice to the forest dwelling community continued the process, performance and major violations in the one decade of implementation of the Forest right Act 2006 in Kerala	46-49
15.	Dr.Sakkeena M .K.	AL ArabiyyalilMuthqaddimeen	50-53
16.	Dr.Sakkeena M. K.	MA AjmaluLugha	54-57
17.	Dr.Sakkeena M. K.	Literature Reader Appreciating Arabic Literature	58-61
18.	Dr.Sakkeena M. K.	Al Baseeth	62-66
19.	Dr. Dhanya P.R.	Book: Fish and Fishery products analysis	67-69
20.	Dr. Dhanya P.R.	Book chapter: Assessment of nutritional quality of fish	70-74
21.	Dr. Dhanya P.R.	Book chapter: Fish and fishery products:Quality Indices	75-78
22.	Dr. Dhanya P.R.	Book chapter: Water/Ice : Assessment of quality	79-82
23.	Dr. Dhanya P.R.	Book chapter: Toxicants: Assessment of	83-86

		quality	
24.	Dr. Dhanya P.R.	Book chapter: Techniques used in fish and fishery products analysis	87-90
25.	Dr. Dhanya P.R.	Book chapter: Waste management in seafood industry	91-94
26.	Dr .Dhanya P.R.	Book chapter: Bioactive compounds from marine sources	95-99
27.	Dr Ranjith M	Eak pyala chaay	100-103
	Dr. Skkeena M.K.	Al Khwathir	104-108
29.	Dr. Amitha Bachan K. H.	Biodiversity for climate Resilience	109-112
30.	Dr. Princy Francis	Emerging trends in commerce and management	113-117
31.	Shiney C. N.	Crime against Women	118-121
	Deepa K.A.	Crime Against Women	122-125
33.	Dr Ranjith M	Sahithy ki anghom se paryavaran ki chalak	126-128
34.	Dr Haseena V. A	Adhivasi jeevitham Attapadiyilude	129-130
	Dr.Muralikrishnan T.R.	English Grammar and Usage	131-133
36.	Sinsy Siddiq	Eco Critical Readings:Nature and Environment in Humanities	134-137
37.	Sinsy Siddiq	Discourse Writing and Biospace	138-142
	Dr Amitha P Mani	Chronicles of Heart	143-146
39.	Dr Haseena V. A	Livelihood Status of the Tribal Women	147-148
40.	Dr Jisha K.C.	Priming mediated biotic stress tolerance in Curcuma longa L.	149-151
41.	Dr Jisha K.C.	Bioenergy Crops: A Sustainable Means of Phytoremediation	152
42.	Dr Jisha K.C.	Wetlands Conservation: Current Challenges and Future Strategies	152-153
43.	Dr Jisha K.C.	Frontiers in Biological Sciences	154-156
44.	Dr.Reshmi S	Engaging Learners in the Twenty First Century	157-159
45.	Dr .AmiithaBachan K.H.	Plant Biodiversity and Environment Conservation	160-162
46.	Dr.Sanjeev kumar.k	Sahityaksamvadh	163-167
47.	Sabitha M.M.	"Flash Fictions: Creative and Innovative Trends in New Literature	168-172
48.	Dr.Ranjith M	Sahithy ke paryavaran vimarsh	173-175
49.	Najma Nazeer	Reimagining Space and Literature	176-179
50.	Dr Haseena V. A	Eco -Tourism In Kerala	180-182
51.	Shiji Ibrahim U	Evolving poetric utterance :New frontiers and visual signature	183-186
52.	Dr. Dhanya P.R	Impact of Climate Change on Hydrological Cycle, Ecosystem, Fisheries and Food Security	187-190
53.	Dr .AmiithaBachan K.H.	Taxonomy and Diversity of the Lesser- Known Varieties of Ficus virens	191-194

54.	Dr. AmiithaBachan K.H.	(Moraceae) from The Western Ghats Addressing the Limitations of Niche	195-198
J <b>T.</b>	Di. AiiiitiaDachan K.ii.	Modelling for Species Distribution	175-176
		Prediction with Reference to the Western	
		Ghats	
55.	Dr Amitha P Mani	Cultural Confluence :Contemporaneity	199-201
		and Congruence	
56.		Cultural Confluence :Contemporaneity	202-204
	Dr Murali Krishnan T R	and Congruence	
57.	Sabitha MM	Functional Grammer and Communication	205-209
		in English	
58.	Reshma T M	Multidiciplinary Research in Education	210-212
59.		Nanotechnology in the Automotive	213
	Dr Ansar EB	Industry	
60.		Peregrination into the Human Psyche	214-217
		through Underlying Spiritual Philosophy	
<i>(</i> 1	Jameelathu KA	in the movie Manassinakkare	210.222
61.		Man as the Oppressor and the Oppressed:	218-220
		A Postcolonial and Psychological	
	Iamaalathu V A	Perspective on the Malayalam movie	
62.	Jameelathu KA	Recent Trends in Multidiciplinary	221-224
02.	Dr. Reshmi S	subjects	221-224
62	Krishnapriya M	Laws And Practices Of Banking	225-226
63.	• •	Laws And Practices Of Banking  Laws And Practices Of Banking	227-229
64.		č	230-235
65.	Krishnapriya M	Basic of Entrepreneurship and management	230-233
66.	Dr Dhanya P.R.	Price Spread of Fishes in Thrissur District	236-241
67.	Dr Dhanya P.R.	Fish Consumption Pattern in Thrissur	242-247
07.	Di Dilaliya F.K.	District	242-247
68.	Dr. K. Kesavan	Post Monsoon Induced breeding of Ikan	248-253
00.	Di. K. Kesavan	koi Kabuto slayer carp, Cyprinus carpio	240-233
		(Cyprinidae) using WOVA FH	
69.	Dr. K .Kesavan	Study on Gut Content of Lunar Tailed	254-259
		Big Eye (Pracanthus hamrur)	
70.	Shibu A Nair	Comparative Study on Biofloc & Cage	260-265
		Culture System in the Production of	
		Tilapia	
71.	Shibu A Nair	Promotion of Aquaculture in Edavilangu	266-271
		Grama Panchayat, Thrissur District,kerala	
72.	Shibu A Nair	Comparative Analysis of the Common	272-277
		Marine Fish Species in Tanzania and	
		India	
73.	Sunniya Abdu	Impact of Malathion on the Biochemical	278-283
		Composition of the Freshwater	
		Fish,Oreochromis Mossambicus	
74.	Dr Sayana K.A.	Nutritional Enhancement of Edible Oils	284-289
		Using Crustacean Shell Waste	
75.	Sreelakshmi T.P.	Chemical & Physical Food Safety	290-295
	1	Hazardsin Aquaculture Farms: A Study in	1

76.	Sugaina Sulaiman M.S.	Kodungallur Area Influence of Chilled Storage on the	296-301
70.	Sugama Sulamian W.S.	Biochemical, Sensory and Microbial	290-301
		Quality of Frigate Tuna (Auxis thazard)	
		Meat.	
77.	Ujjwala Navas	Growth Performance Study of Anabas	296-301
, , .	Ojj wala 14avas	Testudineus by Utilization of Prawn Shell	270 301
		Waste as a Potential Fish Feed Ingredient	
78.	Vaishna P.U.	Marketing Margin and Price Spread of	302-307
70.	vaisima 1.0.	Ornamental Fishes in Selected Districts in	302 307
		Kerala	
79.	Dr Jisha K.C.	Priming Enhances tolerance to	308-313
		Waterlogging Stress in Turmeric	
		Varieties (Curcuma longa L.)	
80.	Dr Jisha K.C.	Crop Improvement of Ginger (Zingiber	314-319
		of(cianale Rosc.) Through Biopriming	
81.	Dr Girija T.P.	Phytochemical and GC-MS/MS Analysis	320-325
		of Strophanthus wightianus Wall. ex	
		Wight	
82.	Dr Sheeba N.H.	Structural Properties and Antibacterial	326-330
		activity of Copper Oxide Nanoparticles	
83.	Dr Sheeba N.H.	The Impact of Deposition Time on the	331-336
		Structural and Optical Properties of	
		Flower-like PbS Thin Films	
84.	Dr Sheena P.A.	Anatase to Rutile Phase Transformation	337-342
		of TiO <sub>2</sub> Nanoparticles	
85.	Minsila Hilal	Parental Bonding and Perception of	343-348
0.6	3.51 11 7711 1	Success Among Late Adolescent Athletes	210.251
86.	Minsila Hilal	Impact of Birth order on Academic	349-354
07	N. '1 TT'1 1	Procrastination Among Young Adults	255.260
87.	Minsila Hilal	Bullying and Resilience Among	355-360
00	Minsila Hilal	Adolescent	361-366
88.	Minsha Filai	Perceived Stress and Pornography Use	301-300
89.	Latheef Paneth	Among Young Adults Academic Adaptability and Resilience	367-372
07.	Lameet I anem	Among College Students based on	307-372
		Learning Style	
90	Latheef Paneth	Relationship Between Expectationism	373-378
90.	Lameer I aneth	and Self Care Behaviour Among Young	313-310
		Adults	
91.	Latheef Paneth	The Effect of Learning Styles on	379-384
<i>,</i> 1.	Zamori i anomi	Academic Adaptation of High School	377 301
		Students	
92.	Latheef Paneth	Gender Role Beliefs and Academic Self-	385-390
, 4.	Zamori i anomi	eficacy Among College Students in	303 370
		Neumerically female dominated	
		education streams	
93.	Farhana Nazar	Effect of Aggression on School Refusal	391-396
-		Behavior Among Adolescence	
94.	Farhana Nazar	Emotion Regulation, Coping Abilities and	397-402

		Cognitive Flexibility Among Service Oriented Youth Organisation Members and Non Members	
95.	Farhana Nazar	Perceived Social Support and Bullying Among Adolescents	403-408
96.	Farhana Nazar	Psychological Well Being and Social Avoidance and Distress Among Theist and Atheist	409-414
97.	Jyothi V	A Study of Behavioural Patterns and Effect of Starvation on Fight Success in the Common House Cricket Acheta Domesticus	415-420
98.	Dr Ranjith M	Malayalam :mahila manas ki khaaniyam	421-425
99.	Dr Ranjith M	Hindi anusandhan ki dasha aur disha	426-429

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Perspectives and Applications

EDITED BY
Akula Ramakrishna
Victoria V. Roshchina



vi	Contents
Section iii	cellular Location of neurotransmitters:their Reception and Signaling
Chapter 8	Tools for Microanalysis of the Neurotransmitter Location in Plant Cells
	Victoria V. Roshchina
Chapter 9	Inter- and Intracellular Signaling in Plant Cells with Participation of Neurotransmitters (Biomediators)
	Victoria V. Roshchina
Chapter 10	Neurotransmitters in Characean Electrical Signaling
	Vilma Kisnieriene, Indre Lapeikaite, and Vilmantas Pupkis
Chapter 11	Dopamine and Their Antagonist Modulates Ion Transport and Cytoplasmic Streaming in <i>Chara</i> Cells
	Anatolii A. Kataev, Olga M. Zherelova, V.M. Grischenko, and R.Sh. Shtanchaev
Chapter 12	Possible Participation of Acetylcholine in Free-Radical Processes (Redox Reactions) in Living Cells
	Bogdan A. Kurchii
Chapter 13	GABAIL Stress To rance in law of Defense arrivarys Care to 219
	K.C. Jisha, A.M. Shar Sa, ar RIB Whr ON
Chapter 14	Glutamate Sensing in Plants
	Jesús Salvador López-Bucio, Homero Reyes de la Cruz, and A. Arturo Guevara-García
Section iV	Role of neurotransmitters in Relationshipsof organisms in Biocenosis
Chapter 15	Role of Acetylcholine System in Allelopathy of Plants
	Rashmi Sharma and Rajendra Gupta
Chapter 16	Production of Neurochemicals by Microorganisms: Implications for Microbiota— Plant Interactivity
	Alexander V. Oleskin and Boris A. Shenderov

13

## GABA/BABA Priming Causes Signaling of DefensePathways Related to AbioticStress Tolerance in Plants

K.C. Jisha, A.M. Shackira, and Jos T. Puthur

#### CONTENTS

13.1	Introduction	219
13.2	Enhancing Stress Tolerance in Plants	220
13.3	GABA/BABA Priming in Plants	221
	Metabolism of GABA/BABA	
	13.4.1 GABA Shunt	223
	13.4.2 BABA Metabolism	224
13.5	Signaling Cascades During GABA/BABA Priming	224
	13.5.1 GABA Signaling Pathway	
	13.5.2 BABA Signaling Pathway	
13.6	Conclusion	
Refer	ences	227

#### 13.1 INTRODUCTION

Abiotic stresses are the most significant factors leading to extensive and erratic loss in agricultural productivity across the world. Owing to the sessile nature of plants, they must cope with adverse environmental conditions, and therefore they must possess a variety of responses to cope with various environmental stresses (Gao et al. 2007). In plants, these stresses adversely affect the growth and productivity by triggering a series of morphological, biochemical, and molecular mechanisms (Wang et al. 2001). Even though the plants have developed specific mechanisms during the course of evolution to sense the subtle changes of growth conditions that trigger many signal transduction cascades (Gao et al. 2007), certain treatments activate stress responsive genes and finally leads to changes at the physiological and biochemical levels in plants.

The quick signaling for inducing the defense mechanism against the adverse environmental conditions requires a stress signal, which gets transduced like a neurotransmitter. Major neurotransmitters found in plants include acetylcholine, epinephrine,  $\gamma$ -aminobutyric acid (GABA), dopamine, levodopa, melatonin, serotonin, and so on (Fait et al. 2006). Later, it was discovered that GABA is largely and rapidly produced in plants in response to various biotic and abiotic stress factors. For example, when insects walk across a leaf, rapid accumulation of GABA was monitored within seconds (Scholz et al. 2015). In addition,  $\beta$ -aminobutyric acid (BABA) a close structural relative of GABA, is a potent inducer of acquired disease resistant in plants. However, its occur-

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Classroom Discourse : An Analysis Based on Critical Discourse Analysis	19
King Richard II: Analyzing the Political Discourse of Power	27:
Task Based and Activity Based Language Teaching	40
Searching for an enemy: Political Discourses on 9/11	49
Siting Translator: Perspectives, Issues and Possibilities	67
Theatre Pedagogy: Using California Shakespeare Theater (Cal Shakes) as a Material for Learning and	
Classroom Activity	80
Translator as Reader: Phenomenology and Text Reception	91

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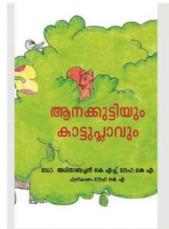








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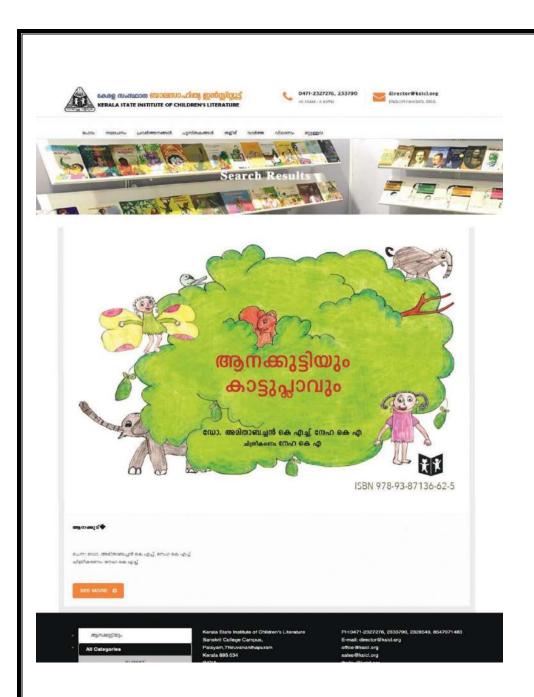
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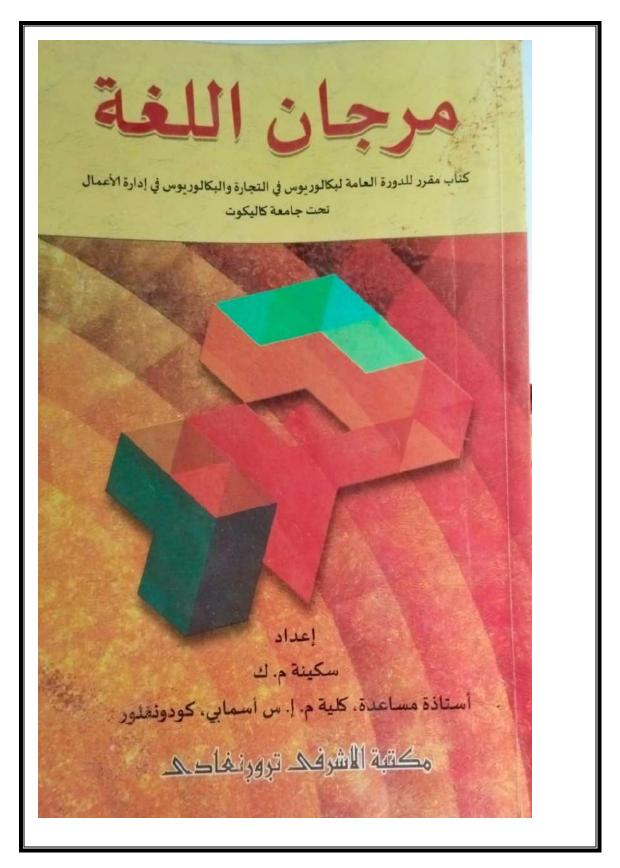


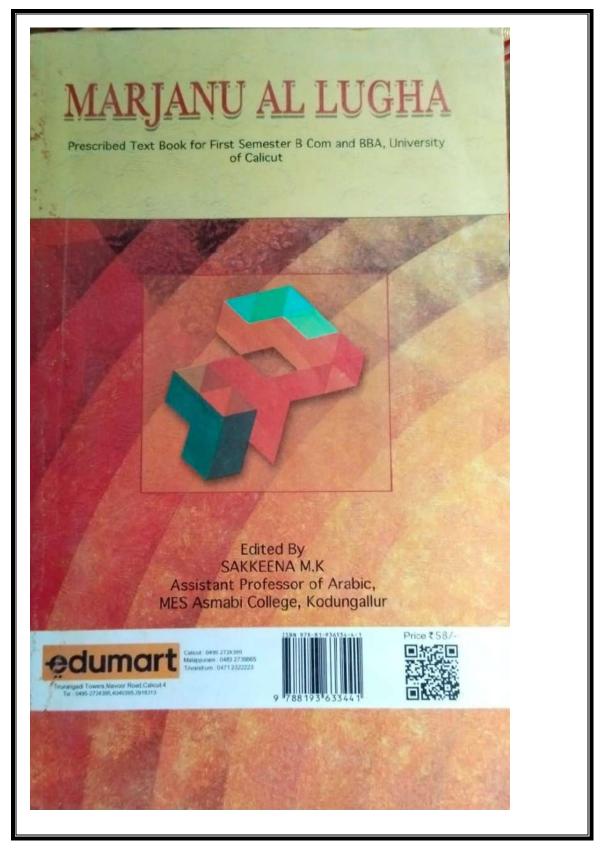






The baby elephant and the jackfruit tree by Dr. Amitha Bachan. One fine day, someone has uprooted the grounds of grandpa jackfruit tree. This book is the journey of Meenu to find out who is behind this.





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- 5. With scientists
- 6. Money transfer
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- 9. Valley of satisfaction
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- 11. Suitable gift
- 12. Princess of the seven seas
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#### Drama

14. Fire sun-second view - chapter 2



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# دراسة تاريخية عن قدوم البرتفاليين إلى كيرلا

#### سكينة ،م. ك

رئيسة قسم اللغة العربية كلية أسباني كودونغلور، وباحثة في كلية فاروق تعن إشراف الدكتور س.ب. أبوبكر

#### مقدمة:

اتسعت حظيرة الاسلام الي شتى أجواء المعمورة .حين وصل نوره على سواحل أفريقا وأوربًا ,ازداد العرب في هاتين القارتين عزّا وشرفا وكان أساس تقدّمهم الدينيّ والتجاري متانتهم الاقتصاديّة .ومصدر هذه المتانة الاقتصادية كان الطيب والفلفل المصدّرين من كالكوت . وقعت الدول الغربيّة في أشدّ دهشة وتعجب حينما شاهدوا ثروة العرب وانتشار الاسلام شرقا وغربا حتى اضطرّوا الى أن يلجؤا الى العرب للقضايا التجاريّة ونحوها .البرتغاليّون وهم أوّل من تجرّأ لهذه المغامرة الهائلة بأن خرجوا الى شبه قارّة الهند متوجّهين نحو كالكوت

قدوم واسكودغاما الى كبرلا: اخرج البرتغاليون تحت قيادة «واسكود غاما»الى الهند بتاريخ ٨ يوليو سنة م ١٤٩٨من عند ملكها «ايمانويل «بعد تهنئته اياهم بكل تمنيات و تبريكات وكانت سئينته تدعى» سامووجبريل «٢٠١ أماأراد» ايمانويل» بارسال» واسكودغاما «الى الهند تمهيد طريقة جديدة الى لبلاد الهندية وتوسيع نطاق العلاقات التجارية ع الدول الشرقية .خرج غاما وأصحابه الى الهند

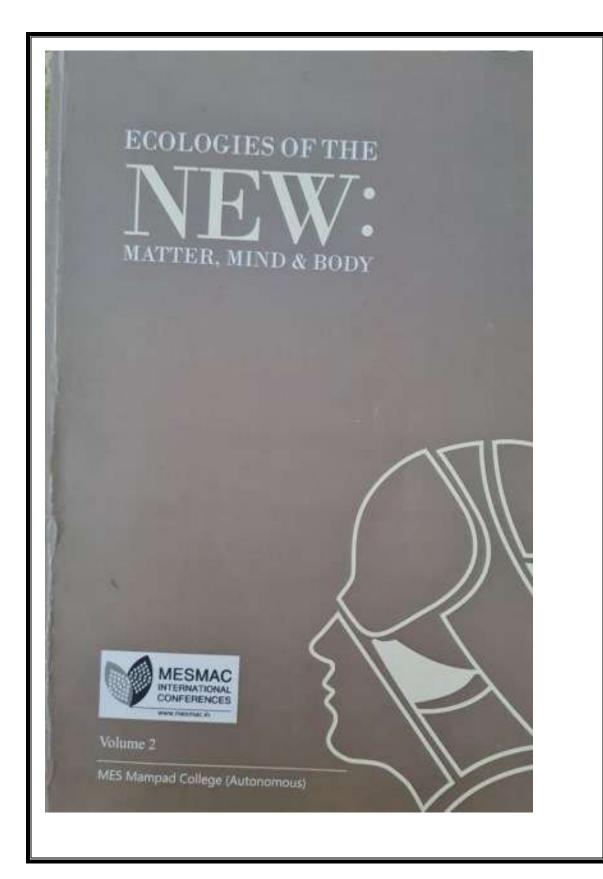
ومعهم ثلاث سفن مضعمة باالزّاد الى ثلاث منول . حتى انتهى الى «ميلندة» من قارة أفريقا عربية السواحل المغربية ولكنّه أخذه الحزن والكأنة أله سفره حين جهل الطّريق المحتص الى الهند فعلوه ملك مغرب ووكّلهم الى قائد عربي اسمه شهاب الله أحمد بن ماجد حتى أرشدهم الى شبه القارة الهنو واتى هي معروفة لدى العرب ومجهولة بالنسل الأوربين ٣٠

سارت المسفن تمخر أمواج البحر الى الطباطية لدى الأوربين وسارت اللجج أيّامه وشهوراء غير اطلّاع على أيّ برّ ولا أرض . وكانت الرّباح ته يشدّه ولكنها ما أوقدت نيران همّتهم وعزيم بعد أيّام سقطت أنظارهم على قطعة من اوبدت مرأى منهم أرض جميلة مليئة بأشجار نار بتاريخ ١٨ مأبو . تهلّلت أساربر وجه غاما واصور ورقصوا وتحدّثوا بأنّ هذه كالكوت أرض المجاوز والفلفل والزّنجيل وما اليها من الرّوات المجاوزات المجا

العالم الجديد الماده والعقل والجسو ،

المصتويات	
أستاذ الدكتور محمد ثناء الله الندوي	
تنمية المستدامة: مقاربة رؤيوية وأدبية في السياق الإسلامي	
/ ك. علي نوفل سمية المحترعات الحديثة ومصطلحاتها في اللغة العربية	
حمد رياض ك وي بينما الثورة الفلسطينية: تحول مثالي في تناول القضية الفلسطينية	
شاد علي وافي ٢٣ـ٣٤	
ربخ تطور النار الحديث في المملكة العربية السعودية	Ł
بد الوهاب برلا في الرحلات العربية في القرن العشرين	45
حمد أسلم الوافي إ.ك. دب المثياليي في الترجمة العربية بإشارة خاصة الى روايات «أيام الماعر» و«شمين»	3
يوسف محمد الندوي عجاز الفق للقرآن الكريم	
معل سليم ربات النفسية الإجتماعية في كتابات الدكتور عائض القرني	
ي الدين الكانياتي الذ الأجنبية وصراع الهوية في رواية ساق الباميو لسعود السنعومي الكويتي	
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ر بابو. اي.کي	شمير
بد العربية الشبهرة في كيرلا	لمعاه
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A historical study on the arrival of the Portuguese to Kerala The fold of Islam has expanded to all corners of the globe. When its light reached the coasts of Africa and Europe, the Arabs in these two continents increased in dignity and honor, and the basis of their religious and commercial progress was their economic strength. The source of this economic strength was the spices and pepper exported from Calcut. The Western countries fell into the greatest astonishment and when they saw the wealth of the Arabs and the spread of Islam east and west, to the point that they were forced to turn to the Arabs for commercial issues. The Portuguese were the first to dare this enormous adventure by leaving the Indian subcontinent, heading towards Calcut.



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Volume 2

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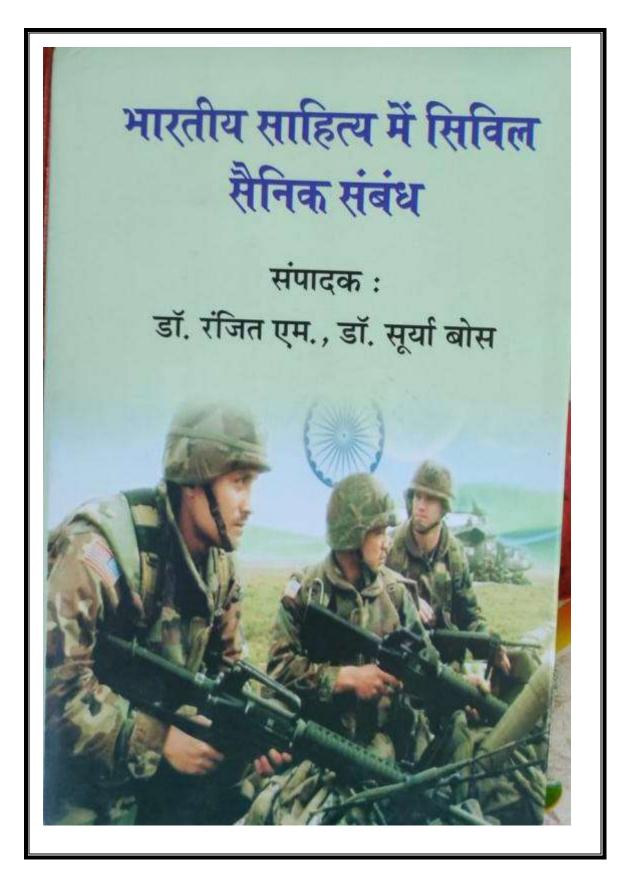
# The evaluation of child morbidity in the marginalized fisher folks of Kerala, India

Dhanya K Department of Economics, M.E.S. Asmushi College, Vembaliar P.O. Thrissur, Kerala

#### Abstract:

This paper is no examine the extend of child morbidity in the hackground of powerty on the aircade marginalized community of fisher folks in Kerala, a part of South Bulla. This will portray the potential impacts of powerty on the socio-economically weater restion. Kerala's social indicators of development such at death rate, birth rate, infant mortality rate, life expectancy. Exercicy rate and the like are comparable to that of the most advanced countries. The study addressed the Objectives, such as to evaluate the socia-economic conditions of fisher folk and their relations with the causes and extend of child merhidity and To commercial the source of funds for financing health care I community based cross sectional study was sline oming fichermen in countal area of two, Panchayaths of Thristus, Kerala, viz. Eriyad and Servener symmetries. Fifty households as the two fishing panels were selected by multistage cluster sampling method. This study is mainly hared on a primary survey, conducted in two. Panchayanta of Theorem Kerala, viz. Erwad and Steenarayanayanan. The narvey covered a total of 50 households (23 from each panchayath) by simple random basis. History reloted to their socio demographic details, occupational characteristics, their personal habits were asked with the aid of the sens structured questionnaire and also their physical parameters were measured. The association between various factors and physical marbalit, were analyzed by using various wast. The results of the study showed that the highest prevalence for physical morbidity in the civilibren's of fishermen was seen for fever (49%) followed by Skin disorders (3%), heart diseases (2%). The study also found the presence of high slitteracy rate, lack of proper social security, long duration of fishing activity, lack of proper protection from sunlight and noise on hourd in the fishermen population. Age was significantly associated with most of the morbidity in the greatest study. The study concluded that the prevalence of mic communicable diseases in the children of fishermen population of Thrissur coost district was made at the high. highlighting the need for specific screening programms and occupational health services for these population. Therefore, it is environed that, there is an argent need to understand the common be with extend child mortiality of the fishermon population and to provide for the occupational briefly arreads to acree and diagrams the chronic diseases in the fighterness community at the ourtheat.

Key would shild markidity, disharmen, health, prevalence, coastal population



# भारतीय साहित्य में सिविल सैनिक संबंध

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- 4. हिंदी कथा साहित्य में नारी
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सम्प्रति : हिन्दी, मलयालम अनुवाद एवं लेखन



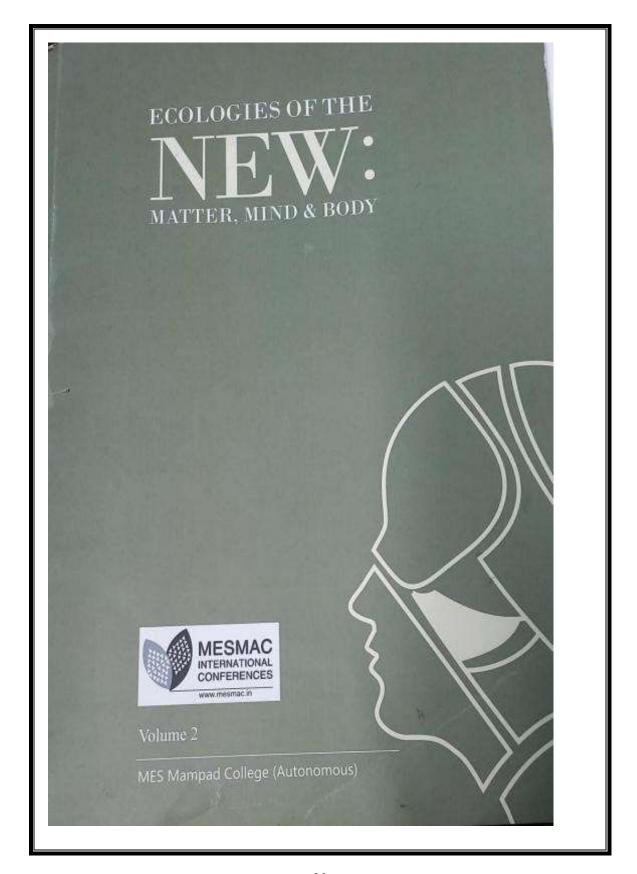


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#### 23. Female-headed Households in Kerala

Jasma NM Essence Scholar Department of Economics

Dr. KV Ramachandran
Department of Economics
Dr. Julie Matter Center, Arangonikara

#### Introduction

The household is regarded as the fundamental social and economic unit of the society. During the last fifteen years we have made considerable progress in identifying the various forms of house hold compositions. Due to the introduction of Globalization, liberalization, and urbanization. We have moved gradually from a single form of family (joint family) to two forms (maciear family) and then to a multiplicity of forms. The content of life (husband wife parent and the child viduouship) in every household includes the interaction between the members of the household their rentiments, their emotions, their pleasures and pains, tensions and conflicts me. These interactions are guided by norms and values attached to position and roles of the members in this regard every member of the household is important. But every role and relationship in the family as well as its composition undergoes transformation in the developmental process.

The community that is the subject of this study is constituted of those women who carn the bulk of the family income and takes all the responsibilities of that family, widows, deserted and divorced women, and women who are separated from their husbands from long stretches of time due to migration and are virtually the heads of the households.

In this study I explore the factors that led to the creation of female headed households in Kersia and also identifying the problems and economic survival of the women to whom the bulkan success and data system provide only very aketchy information.

The household is regarded as the fundamental social and economic unit of the society. Households headed by women have become more significant phenomenon worldwide in the last Latin American countries, in the recent years, there has been a significant increase in the percentage of female headed households (FHH).

It is an important fact that female headed households are rising in number and proportion in most developing regions, currently constituting an estimated 13% of all households in the lindeveloping countries majority of households that are headed by women have many economic

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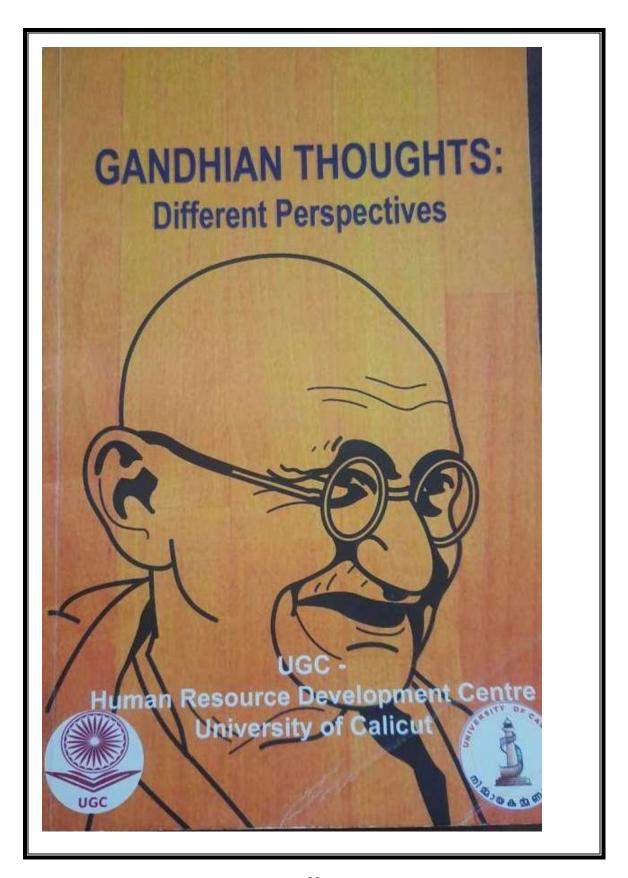
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60	
10. ABDUL RASHEED CK	
Critique on Gandhian Ideology and Practice	109
Present Problems of India, Solutions given by Gar decades back	113 ndhi
12. AJESH C A	
Conversion and Nationalism, A critical reading Gandhi, Kerala Experiences	119 on
13. ANITHA M	422
Gandhian Perspectives on Education : An overview  14. ANJUM HASSAN C A	123
Gandhian Outlook to Technology	136
15. CHITHRA P	
Leadership style , An Analysis through Mahatma Gand	145
16. DEEPA ABRAHAM P	
Gandhian Concept of Sustainable Development	152
17. HUSSAIN V	160
Redefining Economic Development through Gandhi Economic Ideas	-888
18. JINCY V K	171
Life of Mahathma Gandhi An Inspiration for Socientrepreneurship	cial
19. JISHA PJ	179
Gandhian Perspectives on Environmental Sanitation public Health , Transition over the years	rto
	189
20. LISHA K K  Gandhi and Bhagavath Geetha , an Appraisal	
Gandhi and Bridgavatii Geetile /	

#### English

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## Leadership Style, An Analysis through Mahatma Gandhi

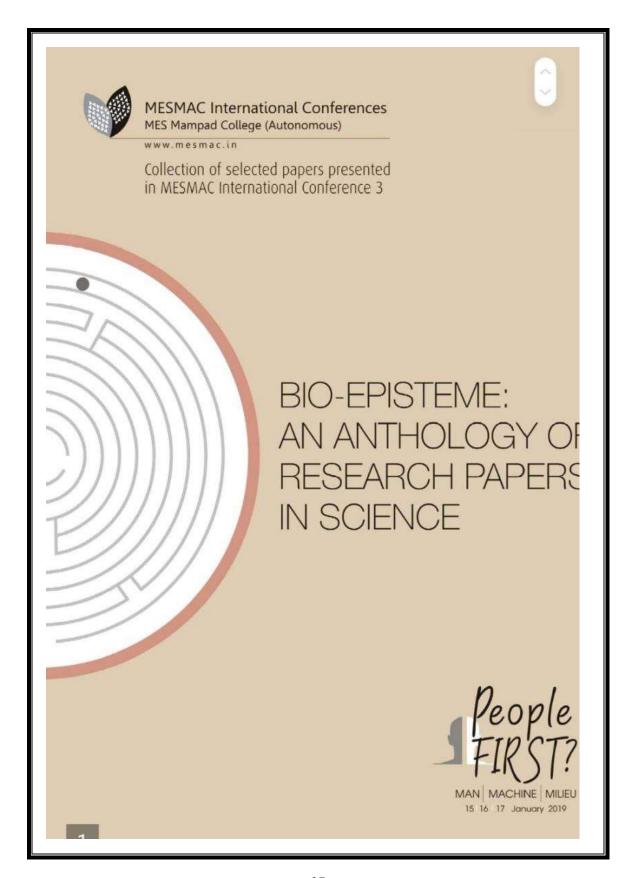
#### Chithra .P

Assistant. Professor, P.G Department Of Commerce M.E.S Asmabi College, Kodungallur

#### Introduction

Leadership is the art of motivating a group of people to act towards attaining a common goal. He or she is the person in the group that possesses the combination of personality and leadership skills that makes others want to follow his or her direction. Leadership style is the way a person uses power to lead other people. Research studies identified different types of leadership styles based on the charecter of the leader and followers. The appropriateness of the leadership styles depend on the function of the leader, the situation and the followers. Great leaders can inspire political movements and social change. They can prompt others to perform, create, and establish something new. Democratic Leadership, Autocratic Leadership, Laissez-Faire Leadership, Strategic Leadership spiritual leadership etc. are some of the examples of leadership styles

Gandhi's leadership style was considered as extremely complex. Knowing that violence only begets violence, he began practicing passive resistance, Satyagraha. Mahatma Gandhi was a leader that brought one of the world's most powerful nations to its knees... by using peace, love and integrity as his method for change. Mahathma Gandhi was not at all an academician or a sequestered visionary. He was deeply concerned with the world around him. He disclaimed being a visionary. He said: "Mere discipline cannot make leadership. The latter calls for faith and "Mere discipline cannot make leadership. The latter calls for faith and vision". The concept of Swaraj expressess the core of his vision for the vision". The concept of Swaraj expressess the core of Gandhian citizen of India, from which the whole range of the concepts of Gandhian philosophy flows. It necessarily starts with political self-rule as a means



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Bio Episteme: An Anthology of Research Papers in Science

8.	K Shabana, KM Suhada & BLV Prasad	
	Synthesis of Sophorolipid from the Fungal Culture Medium Cavdida Bombicola and their Seperation	60
PRO	CESSED FOOD: HEALTHY OR CONVENIENCE?	
9.	Anjali PN, Sudheer KP & Sankalpa KB	
	Development of Gaba Enriched RTE Flakes from Raktasali,	
	Kakasali and Kumkumasali Paddy Varieties	69
10	. Vishal Sharma & Thanishq Das Gupta	
	Compromise of Sensory Attributes Towards the Healthy	
	Nutritious Food: A Case Study of Aonla juice	73
11	. Najwa khader KT, Hasker.E	
	Formulation and shelf life studies of jaggery based sweet	
	(base sweet) and its utilization for various food preparations	87
BIO-E	EPISTEME	
12	. P Faseela & Jos T Puthur	
	High intensity light induced photoinhibitory stress effects	
	on photosynthetic efficiency and antioxidant	
	defence mechanism in rice (Oryza sativa L.) seedlings	96
13	. Shahanas NS & Jisha KC	
	Phytoremediation Potential Evaluation of Four Selected	
	Aquatic Macrophytes	103
14	. Manju Madhavan & Sheeja T Tharakan	
	Phytochemical Studies and Bioactivity Potential of	
	CAESALPINIA SAPPAN Hot Water Exatracts	115
15	. Nazmin Banu	
	Bioinformatics and Plant Science	120
16	. Savidha Nandanan & Monisha KM	
	Role of Phytase in the Plant based Diets of Catla Catla to	
	Improve the Protein and Phosphate Utilization	129
PHYSI	CAL EDUCATION	
17	. Dr. Sujoy Birbanshi	
	THe Impact of BMI on VO2 MAX	135

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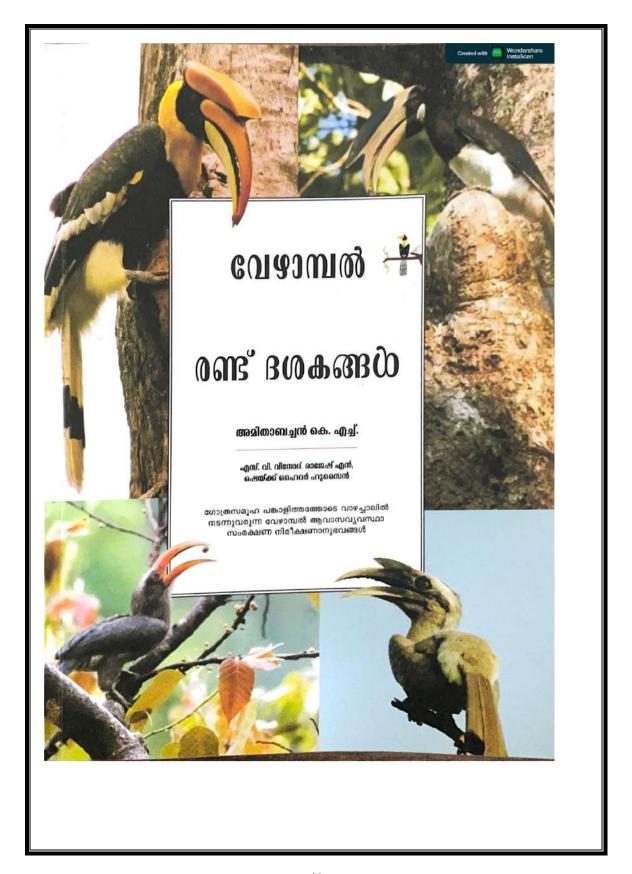
13.

# PHYTOREMEDIATION POTENTIAL EVALUATION OF FOUR SELECTED AQUATIC MACROPHYTES

Shahanas N.S. and Jisha K.C.\*

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Abstract Heavy metal pollution in the water bodies is a serious threat to the world. Phytoremediation is the better solution of this serious threat, since most of the conventional methods are less effective, time consuming and expensive when compare to phytoremediation technology. In the present research work the phytoremediation potential of four aquatic macrophytes (Azolla pinnata R.Br., Lemna minor L., Pistia stratiotes L., and Salvinia molesta D. Mitch.) were compared by studying their stress related metabolism, photosynthetic pigment content and by estimating heavy metals using atomic absorption spectrophotometry. The various physiological and biochemical parameters as well as anatomical attributes were analyzed in the selected four aquatic macrophytes growing in less polluted and highly polluted aquatic habitats. From the results it was found that, all the selected four aquatic macrophytes growing in less polluted aquatic habitat showed more dry weight percentage and less moisture percentage. The photosynthetic pigments like chlorophyll-a, chlorophyll-b and carotenoids decreased under stressed conditions. The most common stress indicating compounds like proline and MDA was also higher in the samples collected from highly polluted aquatic habitats, except in few cases. Quantification of heavy metal showed high Fe content in all samples than Mg, Mn, Zn and Cu. Fe and Mg was the heavy metals which present in all the four aquatic macrophytes under investigation. While analyzing the anatomical attributes, the major difference was seen in the measurements of air cavities and body hairs which provide them buoyancy. Even though the stress related metabolism showed certain differences among the four aquatic macrophytes, they



# വേഴാമ്പൽ നിരീക്ഷണത്തിന്റെ ശാസ്ത്രീയമാനങ്ങൾ അമിതാബച്ചൻ കെ. എച്ച്, അനിത കെ. ടി.

വാഴച്ചാലിൽ തുടങ്ങിവെച്ച വേഴാമ്പൽ കൂട് നിരീക്ഷണ പദ്ധതി ആദിവാസികളുടെ പ്രാദേശിക അറിവുകളെകൂടി ഉൾപ്പെടുത്തി വളരെ ലളിതമായ രീതിയിൽ എന്നാൽ അതിന്റെ ശാസ്ത്രീയ അഭിത്തറക്ക് മങ്ങലേൽക്കാതെ വികസിപ്പിച്ചെടുത്തതുകൊണ്ട് കഴിഞ്ഞ പതിനഞ്ചു വർഷത്തെ നിരീക്ഷണവിവരങ്ങൾ ശാസ്ത്രലോകത്തിനും വനസംരക്ഷണത്തിനും മുതൽക്കൂട്ടാണ്.

നാളിതുവരെ ഏകദേശം 62 മലമുഴക്കി വേഴാമ്പൽ കൂടുകളും 6 പാണ്ടൻ വേഴാമ്പൽ കൂടുകളുമാണ് വാഴച്ചാൽ വനഡിവിഷന്റെ പരിധിയിൽ നിരീക്ഷിച്ചു പോരുന്നത്. തുടക്കത്തിൽ ഇരുപത്തിമൂന്ന് മലമുഴക്കി വേഴാമ്പലിൽ തുടങ്ങി അറുപത്തിരണ്ടിൽ എത്തിനിൽക്കുമ്പോൾ ഓരോവർഷവും നിലവിലുള്ള പുതിയ കൂടുകൾ കണ്ടെത്തിയത് മാത്രമല്ല പല ഭീഷണികൾ കൊണ്ട് ഉപേക്ഷിച്ചു പോയ കൂടുകൾ തിരിച്ച് സജീവമായതും പുതിയ മരങ്ങളിൽ കൂടുകൾ ഉണ്ടായതും ഈ പദ്ധതിയുടെ വിജയത്തിന്റെ സൂചികയാണ്. പരമ്പരാഗതമായി മത്സ്യത്തെയെന്നപ്പോലെ ചില സമയങ്ങളിൽ വേഴാമ്പലുകളെ പിടിച്ചിരുന്ന കാടർ ആദിവാസികൾ ഈ പദ്ധതിയെ അവരുടെ ഭാഗമാക്കിമാറ്റുകയും അത്തരത്തിലുള്ള പ്രവർത്തിയിൽ നിന്ന് പിന്മാറുകയും ചെയ്തതിന്റെ സൂചനയാണ് ഇക്കാലമത്രയും മുക്കും പുഴക്കും ഷോളയാറിനും ഇടയിൽ വളരെ ദുരെയുള്ള ഒരു കൂട്ടിൽ നിന്നും ഒരു പ്രാവശ്യമാണ് വേഴാമ്പലുകളെ എടുത്തതായി കണ്ടത്.

വാഴച്ചാൽ ഡിവിഷനിലെ ഒമ്പത് ആദിവാസി ഊരുകളിൽ നിന്ന് (8 കാടർ, 1 മലയർ) അൻപതോളം ആളുകൾ പലസമയങ്ങളിലായി നിരീക്ഷണത്തിൽ പങ്കാളികളായിട്ടുണ്ട്. വേഴാമ്പൽകൂടുകൾ നേരിടുന്ന പ്രധാന ഭീഷണികളെ ആറായി തിരിച്ചിട്ടുണ്ട്.

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Hornbill

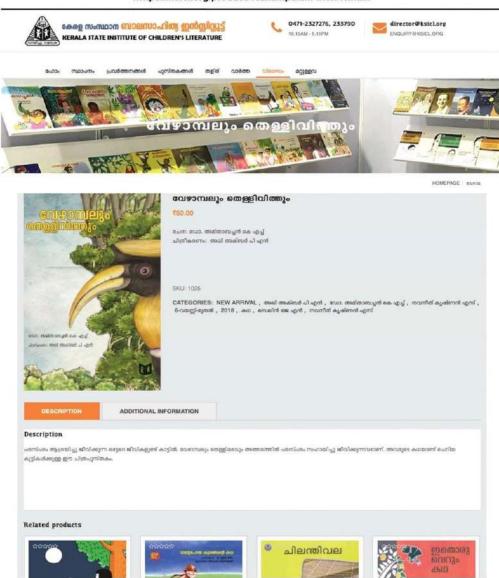
Two decades

Scrutinized Experiences of protection of hornbill ecosystem with the companionship of tribal community of vaazhachal. Scientific norms of hornbill observation. There are a lot of living beings who depend on each other in the forest.

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### /https://ksicl.org/product/vezhampalum-thellivithum



There are a lot of living beings who depend on each other in the forest. The hornbill and black dammar seed are such beings too. This picture book for children is a depiction of that.



The Historical Injustice to the Forest Dwelling Community Continued: The process, performance and major violations in the one decade of implementation of the Forest Rights Act 2006 in

# Kerala

Dr.K.H. Amitha Bachan Western Ghats Hornbill Foundation

Supported by Vasundhara, Natural Justice & MES Asmabi College

Promise and Performance of Forest Rights Act, 2006: KERALA STATE REPORT



Produced as part of COMMUNITY FOREST RIGHTS LEARNING & ADVOCACY PROCESS CFRLA, RRI

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### Historical Injustice to the Forest Dwelling Communities Continued

The process, performance and violations in the first decade of implementation of the Forest Rights Act 2006 in Kerala

Dr.K.H. Amitha Bachan
Western Ghats Hornbill Foundation
Supported by Vasundhara, Natural Justice & MES Asmabi
College
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### Chapter I: Introduction

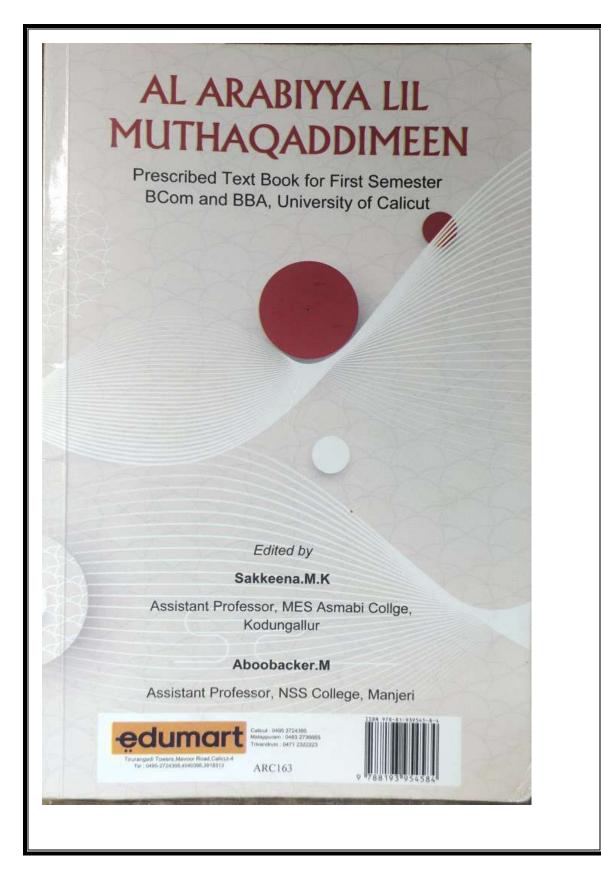
In 2006, the Indian Parliament enacted The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 (hitherto referred as Forest Rights Act (FRA)), a unique emancipatory law with the potential to transform the lives and livelihoods of hundreds of millions of forest-dependent people. The law vests a number of rights over forest lands to forest dependent Scheduled tribes and other forest dwellers, including individual rights over occupied forest lands, community rights over Non Timber Forest Products (NTFP) and other forest produce and the rights to protect and manage Community Forest Resource Rights within traditional village boundaries. The most important right which has a bearing on forest governance and the welfare of tribals and forest dwellers is that of Community Forest Resource Rights.

FRA 2006, its rules 2008 as amended in 2012, is one of the best legal instruments ensuring sustainable livelihood, inclusive conservation and progressive democracy in the grassroot level with the upliftment of the forest dependent community especially Adivasis, Particularly Vulnerable Tribal Groups (PVTG) and women. The various Community Rights (CRs) including full right of the Gramasabha (GS) on Minor Forest Produces including Bamboo and Individual Forest Right (IFR), Record of Right on land of habitation and agriculture can playa great role ensuring the sustainable livelihood of forest dwelling community leading to more sustainability to the land and forest resources if implemented properly. The role of Adivasi community on forest, wildlife and biodiversity is well understood and the paradox of expelling indigenous communities out of the forest areas and increased plantation and development activities within the forest has been a centre stage of discourse for the last few decades. The CFR right is a new conservation area which empowers local communities and their heterogenic traditional practices to support conservation and forest management. The FRA visualise the Tribal Grama Sabha or (Oorukootam) village assembly with the leadership of elected 10-15 membered Forest Right Committees (FRCs) and the Community Forest Resource Management Committees (CFRMCs) as the grassroots level decision making bodies in the matters of Forest Diversion, Forest, Wildlife and Biodiversity protection and management and also the sustainable use and marketing of MFPs. This is indeed a progressive democratic step towards democratisation of the colonial forest legislation first time for independent India.

The FRA 2006 has completed ten years of its enactment and its progress in national and the local Level reflects issues of placement of actual participatory democracy, inclusive conservation and justice to the Adivasis. According to the status report on implementation of Forest Rights Act, by MoTA, GoI, till 31st January, 2017, 41,71,788 claims (40,35,513 individual and 1,36,275 community claims) have been filed and 17,83,262 titles (17,20,742 individual and 62,520 community claims) have been distributed (CFR-LA 2016). The provisions for community rights and community forest resource rights form a key component of the Forest Rights Act and recognition of these rights remain a major area of challenge in the process of implementation even after a lapse of 10 years of enactment.

# TABLE OF CONTENTS

1	Chapter I: Introduction	6
2	Chapter II: Objectives and Methodology	10
3	Chapter III: Key findings	12
4	Chapter IV: Summary and Recommendations	30
5	Chapter V: Major human right violations associated with FRA 2006 implementation in Kerala	33
6	Reference	34
7	Case Study-1 :Systemic violence on tribes including KattunaikkaPVTG and violation of the existing legislation by the State. Relocation of Tribes Wayanad Wildlife Sanctuary since 2006	35
8	Case Study-2 :The CFR process in Thrissur District of Kerala (Malakkappara-Vazhachal- Kadar Experience)	35
9	Case Study-3: The Malakkapara Kadar GS- Post CFR Scenario in Kerala	36
10	Case Study-4:Habitat Right of PVTG	37
11	Case Study-5: Value Added Bamboo Product - Malakkappara Kadar CFRMC	38
12	Case Study-6: Violation of MFP right by Forest Official in Attappady	39
13	Case Study-7: Hornbill and MFP Monitoring involving Tribal Community	40
14	Case Study-8:Impact of Forestry Practices on Primary Natural Forests in Western Ghats, A case study	42
15	Case Study-9 :Formation of District level FRC coordination committee in Thiruvananthapuram	43
16	Case Study-10 : Violation of CFR mapping in Wayanad	43
17	Appendix 1 :Statutory and legal provisions of FRA and CFR at a glance (Definitions of Village, Grama Sabha, CFR, CFRmC, Various Rights under FRA, powers and functions of GS, CFR and CFRmC)	45
18	Appendix 2 : Table	53



### Al Arabiyya lil Muthaqaddimeen

(Bcom / BBA First Semester Common Course Textbook) by: Sakeena M.K, Abubacker M

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The Love of Mother حبّ الأمّ

The Judge - Shuraih شريح القاضي

Module- 3: Drama

Second scene from the Drama (شمس النّهار) - Shamsu al Nahar-

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Module- 4 : Commercial Correspondence

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### 1. Interview

Interview in an accounting company. Asks about nationality, qualifications, language etc.

### 2. Bank

Talks about starting an account.

### 3. Hadith

Whoever turns away from my Sunnah is not of me.

- 4. Ten commandments for success in professional life
- a) Try to understand yourself
- b) Train yourself to organized thinking
- c) Face practical life with joy and optimism
- 5. With scientists

After the Muslims conquered Persia and the Levant, they found libraries full of Greek books, so they translated them into Arabic. The Muslims learned many foreign languages, such as Greek and Latin, and translated the sciences therein.....

### 6. Mother's love

One of my friends invited me to spend my vacation with him in his beautiful, distant country. He lived in a small town half a day's drive from the capital. We spent it talking and laughing and enjoying the beautiful mountain views. The weather was hot in the capital. However, as we climbed the mountains, the weather moderated and became cold....

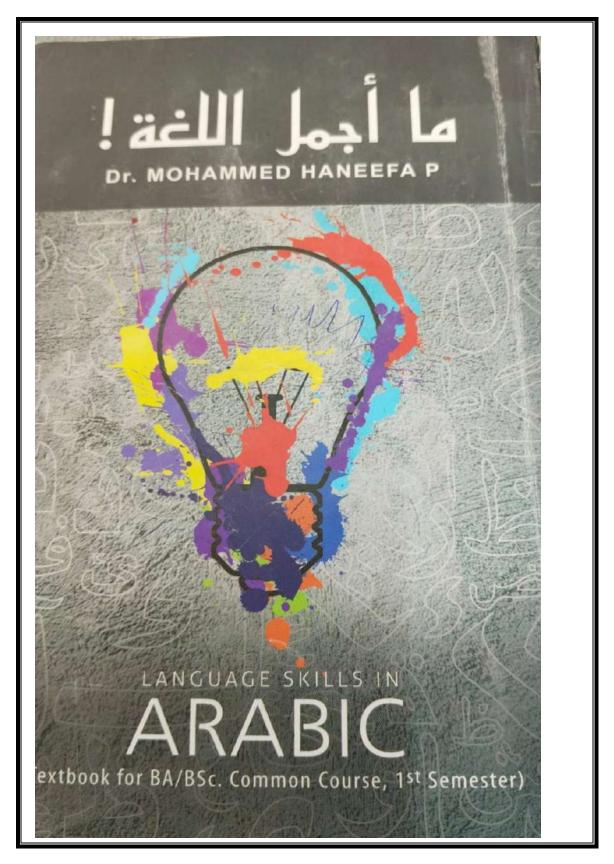
### 7. Shareh Al-Qadi

Omar bin Al-Khattab bought a horse from a Bedouin, paid him its price, then mounted on its back and set off. After a short while, a defect appeared on the horse that prevented it from running, so Omar returned it to its owner and said to him: Take your horse, for it is defective. The Bedouin said: I will not take it, O Commander of the Faithful. I sold it to you intact, and Omar said: Make an arbitrator between you and me. The man said: Shurayh bin Harith Al-Kindi will judge between us. Omar said: I am satisfied with it....

### 8. Sunshine

Shams al-Nahar is a princess and the daughter of the King of Blessings. She excelled at riding horses, playing with swords, reading books, meditating for a long time, and practicing asceticism in what is surprising and awe-inspiring. She chooses Qamar Al-Zaman as her husband, because he passed the test she set for marriage. Qamar Al-Zaman is poor and has no home or family. But he is a gentleman. He doesn't like to live with her in the palace. He asks her to leave the palace and then live with him in the air.....

- 9. Application for the job
- 10. Book inquiry
- 11. Request for books
- 12. Invoice



	mm/2 2		
	100	المحتويات	
	v	تَحِيّات وتَعارُف	الوحدة ١
,	٩	لَا تَـنْتَقِـدْ!	الوحدة ٢
٣	,	عِـنْدَ الطَّبِهِب	الوحدة ٣
*/		النّسرُ والقُبّرةُ	(الوحدة ٤
٤٧		أحِبُك أَكْشَر	( الوحدة ٥
01		هل يعجبك هذا القميص؟	الوحدة ٦
٨٥		طَرَائِف عَرَبِية	الوحدة ٧
79		أينَ قائمة الطعام؟	الوحدة ٨
٧٦		مِنْ يَـوْمِيّاتِ وَلِيدٍ	الوحدة ٩
٨٥		نَذْهَب إلى السّينِما؟	الوحدة ١٠
91	= 100	صلاةٌ إلى العامِ الجَديدِ	الوحدة ١١
90		مُقَابَلَة لِلْوَظِيفَة	الوحدة ١٢
		5	

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د/محمد حنيف. بي

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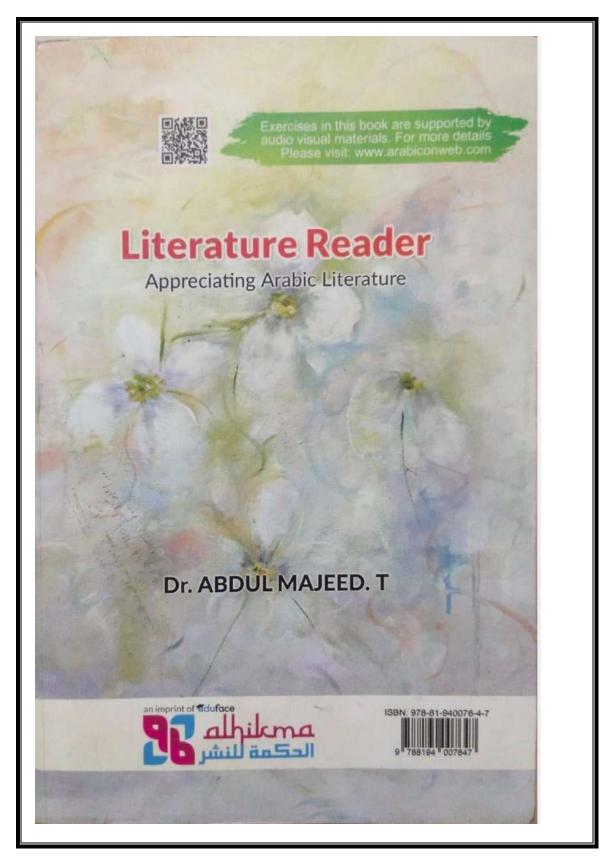
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# Dr. S. Assorbr. Assor

## PREFACE

The book Maa Ajmalallugha, recommended by the University of Calicut to the students of first semester B.A/B.Sc Under Graduate Courses., not only provides the students opportunity to familiarize with the literary styles of different genre, but it also enables them to develop communicative skill in Arabic language, and especially to converse in the diverse life situations. Since every chapter is provided with adequate language exercise at the end, the book helps the readers to acquire skill for bilingual translation. As the conventional grammar teaching has given way to applied grammar, I have taken enough care to provide ample student-friendly, simple practical language proficiency tests also, which fulfills the objective of the teaching learning process. Laying sufficient emphasis on bilingual translation and common usages, the book seeks to develop the problem solving capabilities of the students in target language. It is hoped that the student as well as the teaching community would welcome the present attempt, thanks to its learner-friendly nature. However, the facilitators are requested to ensure that all exercises given in the course book are done either in the class room or by home assignments or both, however simple they might be. Blank pages for doing translation exercises have also been provided. Learners may be prompted to do these translations on their own in the given space.





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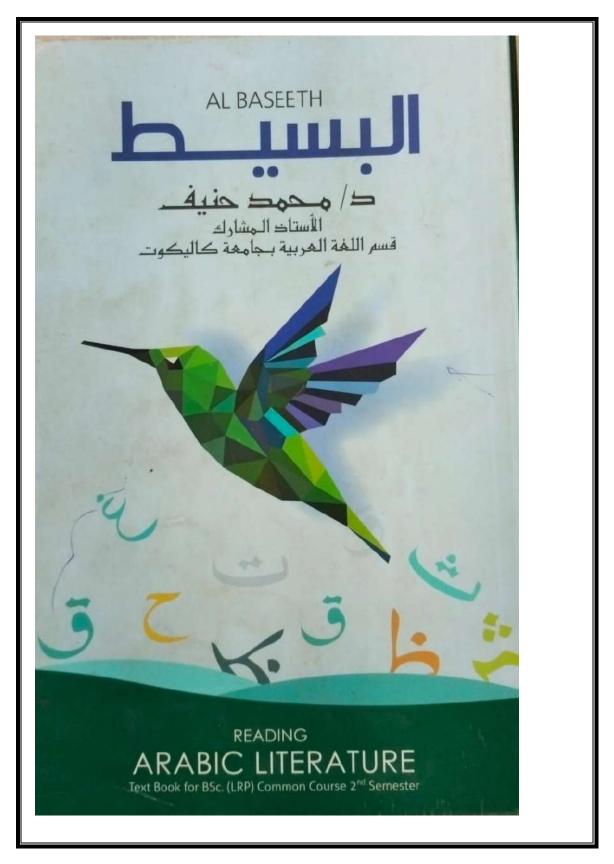
# المحتويات

5				مقدمة	•
7	أقصوصة	رفيقة	:	الوحدة 1	
13	قصة قصيرة	إبليس ينتصر	:	الوحدة 2	٠
23	شعر	الرضاء بقضاء الله	:	الوحدة 3	•
29	حوار	بطني سينفجر		الوحدة 4	•
39	مقالة	اصنع من الليمون	:	الوحدة 5	٠
45	شعر	يا أخي الإنسان	:	الوحدة 6	•
50	قصة	الغريب	:	الوحدة 7	•
63	مذكرة رحلة	رحلة إلى ماليزيا	:	الوحدة 8	•
72	**********	معجم المفردات الصعبة	:	ملحقات	
85		أسئلة نموذجية	2		

It is a book named Min vahyil- adab (Appreciating Arabic literature) which is a common course book for bachelor of arts and bachelor of science under the university of calicut. It is edited by Dr. Abdul Majeed T (Assistant professor, Farook college). It contains 8 chapters.

(3)

- 1. Mate story
- 2. Satan wins short story
- 3. Satisfaction with God's will poem
- 4. My stomach is going to explode conversation
- 5. Make with lemon article
- 6. Oh my fellow human being poem
- 7. The stranger story
- 8. A trip to Malaysia trip note



This book is intended to be the text book for BSc.(LRP) Common course is semester of University of Calicut. The book introduces writers ranging in Kahili Gibran, Mahmud Dervish and Nizar Qabbani among others and bic through studying literary samples of different genres and through studying literary samples of different genres and through y chapter is then followed by corresponding language exercises with coincide ample but simple language exercises in a student's friendly in the pattern of a workbook keeping up the modern methodologies guage acquisition. The method followed here is of enabling students of teaching grammar as such.

facilitators are requested to ensure that all exercises given in the book are done inside the class rooms themselves, however simple ight seem. Blank space for doing translation exercises are also d. Learners may be prompted to do these translations on their own ven space.

Dr. Mohammed Haneefa P, Associate Professor (on deputation) and Research Guide in the Department of Arabic, University of Calicut has been teaching Arabic language and literature in the university system for the last two decades, and has published widely on the areas of his research interest in various national and international journals. There are seven prescribed text books it being taught in colleges affiliated to Kannur and Calicut universiworks penned or edited by Mohammed Haneefa are: Abqariyyun and Mikhael Nuaima: Al Adeebuthair, Muhadasath Youmiyya, wa Murasalath, Al Ajnihath, Al Mashayirul Adabiyya, Ma Ajmalal-Muhavara. He has been elected to the Boards of Studies in Arabic lorks during different tenures of his career in Kannur and Calicut and he has also been elected to the Faculty of Humanities and the figuages of University of Calicut.

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	المحتويات	
7	اللغة الأخري - جبران خليل جبران.	الوحدة ١
/16	عرّف نفسك - الحوار.	الوحدة ٢
26	كف الأذى - د. عبدالرحمن العريفي.	الوحدة ٣
39)	أول يوم في الجامعة - الحوار.	الوحدة ٤
47	القدس – نزار قباني. (الشعر)	الوحدة ٥
51)	عندنا غرفة محجوزة لك - الحوار.	الوحدة ٦
59	قصص من جحا.	الوحدة ٧
70	هذه الوردة لك مني - الحوار.	الوحدة ٨
78)	لن ننسى - نجيبة محمد الرفاعي.	الوحدة ٩
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8	بطاقة هوية - محمود درويش. (الشعر)	الوحدة ١١
04)	لماذا تغيبت عن الدراسة? - الحوار.	الوحدة ١٢

# PREFACE

Al Baseeth is a comprehensive language skill development course with specially designed different modules for students of under graduate courses. The book acquaints the young readers with the exquisite literary styles as well as the excellent intellectual ideas of a variety of renounced writers ranging from Kahlil Gibran, the Philosopher of love, to the Palestinian national poet Mahmud Dervish and Nizar Qabbani among others and also helps undergraduate students develop their communication skills in Arabic through studying literary samples of different genres and through situational conversations pertaining to diverse real life contexts. The University of Calicut has recommended this book for the students with the objective of developing language proficiency in Arabic. Since the conventional method of grammar teaching has been replaced for applied grammar, the book has given enough space for practical language proficiency and development of fluency in Arabic speaking. I have largely adopted a learner centered approach in the organization of different modules in the book which provides the students ample practical learning experience.

Each lesson in the book is meticulously composed with such an objective, and a set of comprehensive exercises is included for enabling the learners to acquire language proficiency in both literary usage as well as verbal skill. So the facilitators are requested to ensure that all exercises given in the course book are done inside the class rooms themselves, however simple they might Saleena Mathew · Maya Raman Manjusha Kalarikkathara Parameswaran Dhanya Pulikkottil Rajan

# Fish and Fishery Products Analysis

A Theoretical and Practical Perspective



Saleena Mathew - Maya Raman - Manjusha Kalarikkathara Parameswaran - Dhanya Pulikkottil Rajan Fish and Fishery Products Analysis

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This novel and informative book discusses the various aspects of seafood quality. The book is divided into 7 broad sections, each tackling a different aspect. The first section covers the general aspects relevant to the nutritional quality of the fish and the various extraction protocols for macro-/ micro-nutrients. The second section provides insights into handling and the principles of thermal and non-thermal processing techniques for commercially important fishery products. The quality standards and safety concerns in the seafood industry and consumption are discussed in this section. The freshness indices of the processed products including biochemical, microbiological and toxicological characteristics are also included. The third section discusses the physico-chemical characteristics and quality parameters of potable water/ ice. The fourth section includes the quality assessment of various toxicants related to seafood products. The fifth section deals with the specific aspects such as principle, instrument and procedures of conventional and novel analytical instruments relevant to the seafood industry. The sixth section deals with the seafood waste management including solid and liquid seafood wastes. Presently, there is a great awareness regarding environmental sustainable processing/ preservation techniques. The final chapter discusses the bioactive compounds from under-utilized marine sources showing pharmaceutical/nutraceutical applications.



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## Assessment of Nutritional Quality of Fish

1

### 1.1 Nutritional Quality of Fish

### 1.1.1 Water: The Universal Solvent

Water is the most profusely found substance in living systems, making up 70% or more of the weight of most organisms. Water is an elemental and often predominant constituent in many foods. It supports chemical reactions and also reactant in hydrolytic processes. In the food preservation point of view, the removal or binding of water hinders many reactions and therefore inhibits the growth of microorganisms and improves the shelf lives of foods. Water also contributes considerably to the texture of food because it interacts with other constituents, viz., proteins, polysaccharides, lipids, and salts.

Water forms hydrogen bonds with itself and with solutes. Hydrogen bonds between water molecules provide the cobesive forces that make water a liquid at room temperature. Water has a higher melting point, boiling point, and heat of vaporization than most other common solvents. Attractive forces between adjacent water molecules give the liquid state of water great internal cohesion. Polar biomolecules dissolve readily in water because they can substitute water water interactions with more energetically favorable water-solute interactions. The water molecule and its ionization products, H and OH, influence the structure, self-assembly, and properties of all cellular components, including proteins, nucleic acids, and lipids. The attractive forces between water molecules and the slight tendency of water to ionize are of crucial importance to the structure and function of biomolecules.

### 1.1.1.1 Chemistry of Water Molecule

Each hydrogen atom of a water molecule shares an electron pair with the central oxygen atom. The H-O-H bond angle is 104.5°, i.e., 5° less than the bond angle of a perfect tetrahedron (189.5°). The nonbonding orbitals of the oxygen atom slightly compress the orbitals shared by hydrogen. The oxygen nucleus attracts electrons more strongly than does the hydrogen nucleus (i.e., the proton), and hence oxygen

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## Contents

1	Asse	ssment	of Nutritional Quality of Fish	- 1
	1.1	Nutriti	ional Quality of Fish.	1
		1.1.1	Water: The Universal Solvent	- 0
		1.1.2	Fish Proteins	6
		1.1.3	Fish Lipids	12
		1.1.4	Nonprotein Nitrogenous Compounds	15
		1.1.5	Vitamins, Minerals, and Trace Elements	22
		1.1.6	Carbohydrates	32
		1.1.7	Flavor Bearing Constituents	37
	1.2	Proxin	nate Composition/Nutritional Quality Evaluation	39
		1.2.1	Analysis of Moisture	39
		1.2.2	Analysis of Protein	40
		1.2.3	Analysis of Crude Lipid.	42
		1.2.4	Analysis of Ash Content	43
		1.2.5	Analysis of Carbohydrates	45
	1.3	Amine	Acid Composition Analysis by HPLC	46
		1.3.1	Sample Preparation for Amino Acid Analysis	47
		1.3.2	Apparatus	47
		1.3.3	Chromatographic Conditions	47
	1.4	Analys	as of Fatty Acids	48
		1.4.1	Analysis of Fatty Acids Using Gas	
			Chromatography-Mass Spectrometry (GC-MS)	49
		1.4.2	H-NMR Spectroscopy of Fatty Acids	50
	1.5	Analys	is of Phospholipids	51
		1.5.1	Direct Estimation of Phospholipids	
			(Colorimetric Method)	51
		1.5.2	Phospholipid Determination by Phosphorous Assay	51
		1.5.3	HPLC of Phospholipids	53
	1.6	Analys	is of Vitamins	54
		1.6.1	Analysis of Water-Soluble Vitamins	54
		1.6.2	Analysis of Fat-Soluble Vitamins	54

# Fish and Fishery Products Analysis



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This novel and informative book discusses the various aspects of seafood quality. The book is divided into 7 broad sections, each tackling a different aspect. The first section covers the general aspects relevant to the nutritional quality of the fish and the various extraction protocols for macro-/micro-nutrients. The second section provides insights into handling and the principles of thermal and non-thermal processing techniques for commercially important fishery products. The quality standards and safety concerns in the seafood industry and consumption are discussed in this section. The freshness indices of the processed products including biochemical, microbiological and toxicological characteristics are also included. The third section discusses the physico-chemical characteristics and quality parameters of potable water/ice. The fourth section includes the quality assessment of various toxicants related to seafood products. The fifth section deals with the specific aspects such as principle, instrument and procedures of conventional and novel analytical instruments relevant to the seafood industry. The sixth section deals with the seafood waste management including solid and liquid seafood wastes. Presently, there is a great awareness regarding environmental sustainable processing/ preservation techniques. The final chapter discusses the bioactive compounds from under-utilized marine sources showing pharmaceutical/nutraceutical applications.



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VI				Consent
	1.7	4 100	sis of Minerals Atomic Absorption Spectrophotometry	
	Refe	rences.		. 6
2	Fich	and Fis	hery Products: Quality Indices	
-	2.1	Process	extractions buch and Scattered	1075
	-	2.1.1	Thermal Preservation recumques	61
		2.1.2	Newel Nonthermal Processing and Preservation	***
			The bariouses	61
	2.2	Bioche	emical Changes During Processing	
		221	Postmortem Biochemical Changes	9/
	2.3	Value .	Addition	4
		2.3.1	Mince-Based Products	· - Q1
		2,3.2	Allied seafood delicacies	94
		2.3.3	Miscellaneous	95
	2.4	Determ	mination of Functional Quality of Processed Food	. 9
		2.4.1	Determination of Color and Odor	9
		2.4.2	Determination of Salt Content	9
		2.4.3	Determination of Water Activity	10
		2.4.4	Evaluation of Sensory Parameters	10
		2.4.5	Evaluation of Texture	10
		2.4.6	Determination of Electrical Properties/Redox	
			Potential	10
		2.4.7	Folding Test for Surimi	10
		2.4.8	Specific Gravity of Fish Oils	11
		2.4.9	Analysis of Starch in Breaded and Battered Products.	
	2.5	Detern		
		2.5.1	Assessment of Protein Degradation	II
		2.5.2	Assessment of Lipid Oxidation	
		2.5.3	Assessment of Carbohydrate Catabolites	- E

2.5.4

2.5.5

2.6.1

2.6.2

2.7.1

2.7.3

2.7.4

2.7.5

2.7.6

2.6

2.7

Assessment of Nonprotein Nitrogen (NPN) . . . . . . . . 122

Assessment of Nucleotides and Nucleotide Catabolite . . . 123

 2.6.3 Determination of Ammonia
 126

 Microbiological Parameters
 127

Detection and Identification of Fecal Streptococci . . . . . 129

Detection and Identification of Salmonella typhimurium. . . 129

Detection and Identification of Vibrio cholerae

## Fish and Fishery Products: Quality Indices

2

### 2.1 Processing of Various Fish and Seafood

Even though the nutritive value and the unique taste of seafood (fish, shell fish, motlusks, and echinoderms) have gained immense popularity in all continents, the susceptibility of these to postmortem spoilage and rapid deterioration, and hence, the shortened shelf life, is of great concern. Species, handling, and storage conditions affect the nutritional and microbial qualities of seafood. Further, two most important concerns with respect to marketing and distribution of scafood are their high perishability and poor hygienic quality. To overcome these issues, various preservation methods are being adopted where time-temperature association is the key determinant (Boziaris 2013; Mohan et al. 2008; Borda et al. 2018). Feeding habits, primary microbiological load, season, geographical origin, and handling conditions influence the shelf life of seafood. Therefore, it is decisive to have a science-based comprehension of the growth and activity of spoilage microorganisms in seafood, in order to reduce the losses and preserve the food. Hence, the chief aim of fish preservation is to delay, reduce, or inhibit the enzymatic, chemical, and microbial spoilage by managing the storage temperature, water activity, and pH or by using chemical preservatives. The preservation of seafood can be attained by conventional methods (thermal) such as chilling, drying, smoking, refrigeration or freezing, and canning or by employing novel techniques (nonthermal) such as pulsed light, high hydrostatic pressure, pulsed electric fields, ultraviolet light, high-intensity ultrasound, oscillating magnetic fields, ionizing radiation, etc. Currently, consumers are in continuous demand for minimally processed food with extended shelf life and safety assurance.

## 2.1.1 High- and Low-Thermal Preservation Techniques

High- and low-thermal preservation can be done either for short and long duration.

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# Water/Ice: Assessment of Quality

3

Water is the most important component in fish processing industry and in icemaking. The contamination of water used in seafood industry (sources) will increase the pathogen load in fish posing a serious health hazard to the consumers. Hence, it is urgent to meet the basic requirements of the water/ice quality and should meet the drinking water standards. The World Health Organization (WHO) has issued guidelines for drinking water quality and has identified that very stringent standards cannot be used universally; and hence, a range of guideline values for more than 60 parameters were elaborated. The water/ice quality parameters have to be qualitatively and quantitatively analyzed and monitored regularly for each source of water supply such as at the point of collection (harbor) to the final use (until packaging). The qualified technicians are to perform the analysis. The water sampling and analysis should be certified by ISO-certified laboratories. The different sources of water used in seafood industry could be bore wells, municipal mains, water tanks, reservoirs, and harbor basin water. The contamination of bore wells and municipal mains may occur from corroded casings, sewage, etc. The bore well water needs to be tested every month. Similarly, the tanks and reservoirs need to be checked regularly for the residual chlorine levels. Periodic scrubbing may assist in preventing deposition. The municipal mains, water tanks, and reservoirs have to be tested half yearly. Harbor basin water has to be tested yearly, more accurately at the peak of the dry season and the wet season, when the chances of contamination are high.

The testing procedures include:

- (a) Physical tests
- (b) Chemical tests
- (c) Bacteriological tests

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Contents vii

		2.7.7	Detection and Identification of	
			Staphylococcus aureus	131
		2.7.8	Detection and Identification of	
			Listeria monocytogenes	131
		2.7.9	Detection and Identification of Klebsiella	132
		2.7.10	Detection and Identification of Shigella	132
		2.7.11	Detection and Identification of Campylobacter	135
		2.7.12	Determination of Total Fungi Count	138
	2.8		in Quality Control and Assurance in Seafood	1
			ing Industry	138
		2.8.1	HACCP, ISO, and FAO	138
		2.8.2	comoca rancinas una rropayamos.	142
				143
3	Wate	er/Ice: As	sessment of Quality	145
	3.1	Physica	and Chemical Characteristics of Water	146
		3.1.1	Determination of pH	146
		3.1.2	Determination of Temperature	146
		3.1.3	Determination of Color	147
		3.1.4	Determination of Turbidity	148
		3.1.5	Determination of Odor and Taste	149
		3.1.6	Determination of Alkalinity	150
		3.1.7	Determination of Specific Conductance/Conductivity	151
		3.1.8	Determination of Salinity	153
		3.1.9	Determination of Total Dissolved Solids	154
		3.1.10	Determination of Total Suspended Solids	155
		3.1.11	Determination of Hardness	156
		3.1.12	Determination of Chloride, Fluoride, Sulfate, Nitrite,	
			and Phosphate	158
	3.2	Toxic C	components	165
		3.2.1	Determination of Copper, Chromium, Cadmium,	
			Zinc, Lead, Mercury, Iron, and Manganese	165
		3.2.2	Determination of Pesticides	
		3.2.3	Determination of Phenols	174
		3.2.4	Determination of Oil/Grease	
	3.3	Organic	Nutrient and Demand	. 177
		3.3.1	Determination of Biological Oxygen Demand	. 177
		3.3.2	Determination of Chemical Oxygen Demand	. 179
		3.3.3	Determination of Nitrates	
	3.4		ological Parameters	
	-7.7	3.4.1	Determination of Most Probable Number (MPN)	. 181
		3.4.2	Determination of Total Coliforms in Water	-
		3.4.2	(Five-Tube MPN Method)	. 181
		2.12	Determination of Standard Plate Count	
		3.4.3		
		3.4.4	Determination of Total Coliforms/Fecal Coliforms	. 182

# Fish and Fishery Products Analysis



A Theoretical and Practical Perspective

This novel and informative book discusses the various aspects of seafood quality. The book is divided into 7 broad sections, each tackling a different aspect. The first section covers the general aspects relevant to the nutritional quality of the fish and the various extraction protocols for macro / micro-nutrients. The second section provides insights into handling and the principles of thermal and non-thermal processing techniques for commercially important fishery products. The quality standards and safety concerns in the seafood industry and consumption are discussed in this section. The freshness indices of the processed products including biochemical, microbiological and toxicological characteristics are also included. The third section discusses the physico-chemical characteristics and quality parameters of potable water/ ice. The fourth section includes the quality assessment of various toxicants related to seafood products. The fifth section deals with the specific aspects such as principle, instrument and procedures of conventional and novel analytical instruments relevant to the seafood industry. The sixth section deals with the seafood waste management including solid and liquid seafood wastes. Presently, there is a great awareness regarding environmental sustainable processing/ preservation techniques. The final chapter discusses the bioactive compounds from under-utilized marine sources showing pharmaceutical/nutraceutical applications.



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		100 100 00	Determination of Biofouling and Biofilm Formation	8
		3.4.5	- C Pathogens	82
	3.5	2.4.0 Dist	animal Dagameters	83
	200	3.5.1	C Disconlankton and Z DODIADKION	83
	3.6	Padi	osotive Elements	83
	200	3.6.1	t Data/Photon Emiller	88
	An	pendiees		88
	-	Anne	ndix 3 1 Drinking Water Quality Standard	91
		Anna	adix 3.2 Deinking Water Quality Standard	91
		Anne	ndix 3.3 Drinking Water and Human Health Quality	93
		Criter	44	94
		Appe	ndix 3.4 EPA Standards for Toxin Metals, Pesticides,	<b>X4</b> .
		and R	adjoactive Components in Drinking Water	95
		Apper	ndix 3.5 Water Quality (Indian Standard Drinking	37
		Water	c or a mic 10500, 1001\)	97
		Apper	ndix 3.6 Different Types of Phytoplankton	33
		and Z	ENDING TO THE PROPERTY OF THE	99
	Ref	erences.		03
	P\$1	•		25
4			ssessment of Quality 2	03
	4.1		sis of Food Additives	03
		4.1.1	Synthetic Food Additives and Adulterants 2	03
		4.1.2	Analysis of Antibiotics	14
		4.1.3	Analysis of Pesticide	15
		4.1.4	A CANADA	17
	40	4.1.5	Analysis of Metallothioneins 2	24
	4.2			25
		4.2.1	Analysis of Aflatoxin	25
		4.2.2		26
		4.2.3	Shellfish Toxins	36
		4.2.4	Other Toxins	142
	4.3	Analys	sis of Filth	249
		4.3.1	Examination for Insects and Rodent Contamination	249
	10/10/	4.3.2	Filth Recovery Methods	252
	4.4	Emergi	ing Pathogens	256
		4.4.1	Campylobacter	256
		4.4.2	E. coli O157:H7	256
		4.4.3	Salmonella	257
		4.4.4	Identifying Reservoirs	257
		4.4.5	Detection of Emerging Pathogens	258
	Refer	ences	***************************************	259
	Toch	James II	and in Fig. 1 and a	
	rechr	ilques U	sed in Fish and Fishery Products Analysis	263
25	5.1	mouth	cons Osed for Physiochemical Analysis	26
		MARKA.	par meter	26
		5.1.2	Moisture Meter	26

Toxicants: Assessment of Quality

4

### 4.1 Analysis of Food Additives

Food is inevitable to sustain life, and as a result, contaminated food becomes a very common source of toxicant exposure to humans. Several naturally occurring and synthetic contaminants find their way into food. More than 2500 chemical substances are added to foods to modify it. They are grouped under the regulatory term "food additives" and are defined as chemical substances deliberately added to foods in known quantities for purposes of assisting in the processing of foods and preservation of foods or in improving the flavor, texture, or appearance of foods. Food additives can be used directly or indirectly. Direct additives are those that are intentionally added to foods for a specific purpose, while indirect additives are those to which the food is exposed during processing, packaging, or storing. If a substance is added to a food for a specific purpose, it is referred to as a direct additive. Food additives and preservatives are used in today's food supply to prevent foodborne illness, enable the transportation of food to areas that otherwise wouldn't be possible, and for the efficient manufacture of products to consistently meet the established quality standards from batch to batch. The US Food and Drug Administration evaluates the safety of food additives and determines how they may be used in the food supply. If an additive is approved, the FDA issues regulations that may include the types of foods in which it can be used, the maximum amounts to be used, and how it should be identified on food labels. This section looks into the analysis of some of the commonly used intentional and unintentional additives.

# 4.1.1 Synthetic Food Additives and Adulterants

Synthetic food additives can be added intentionally to food to perform certain technological purposes which consumers often take for granted. They are needed to ensure that processed food remains safe and in good condition throughout its journey from factories or industrial kitchens, during transportation to warehouses and

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Contents	æ
Deliterities	

	5.1.3	Hygrometer
	5.1.4	Torry Meter
	5.1.5	Microkjeldhal Apparatus
	5.1.6	Soxhlet Apparatus
	5.1.7	Muffle Furnace. 272
5.2		natography
31000	5.2.1	HPLC (High-Performance Liquid Chromatography) 275
	5.2.2	Gas Chromatography (GC)
	5.2.3	Conventional Chromatographic Methods
	5.2.4	High-Performance Thin-Layer Chromatography
		(HPTLC) 291
5.3	Electr	ophoresis
	5.3.1	Polyacrylamide Gel Electrophoresis [PAGE] 295
	5.3.2	Agarose Gel Electrophoresis
	5.3.3	Isoelectric Focusing (IEF)
5.4	Nephe	elometry, Photometry, and Spectrometry
	5.4.1	Nephelometry and Turbidimetry
	5.4.2	UV-VIS Spectrophotometer
	5.4.3	Atomic Spectroscopy
	5.4.4	FTIR Spectroscopy
	5.4.5	NMR Spectroscopy
	5.4.6	Mass Spectrometry
5.5	Micro	scopy 31
	5.5.1	Light Microscope
	5.5.2	Electron Microscope
5.6	Refrac	tometer
	5.6.1	Refractive Index
	5.6.2	Brix Scale and Common Brix %
	5.6.3	Factors Influencing Refractive Index
	5.6.4	Types of Refractometers
5.7	200 CO 100 CO 10	neters
2.1	5.7.1	Orifice Viscometers
	5.7.2	Capillary Viscometers
	5.7.3	Falling Piston Viscometers
		Rotational Viscometers
	5.7.4	Roundles American College Coll
	5.7.5	
	5.7.6	Vibrational Viscometers
5.8	Rheon	neter
	5.8.1	Rotational Rheometers
	5.8.2	Eccentric Viscoelastic Rheometry
5.9	Texture	e Analyzer 3
	5.9.1	Instrumentation
5.10		ential Scanning Calorimeter
TO THE	5.10.1	DSC Instrumentation
511		-O Elemental Analyzer
5.11	CHINO	-O Elemental Analyzer

# Techniques Used in Fish and Fishery products Analysis

# 5.1 Instruments Used for Physiochemical Analysis

### 5.1.1 pH Meter

The pH meter is an electronic device for measuring the pH (acidity or alkalinity) of a sample. It was only in 1909 that the concept of pH (hydrogen ion concentration) was introduced by Soren Peter Lauritz Sørensen and an electrode for pH measurements was realized in the year 1922 by W.S. Hughes (Nikhil et al. 2016).

### 5.1.1.1 pH Meter Probe

The probe is a key part of the pH meter. It is a rodlike structure usually made up of glass. At the bottom of the probe, there is a bulb, which is sensitive part of a probe that contains the sensor.

The pH electrode is typically an ion-selective electrode (ISE) that responds to one specific ion in solution, the hydrogen ion. The most common forms of pH electrode are the glass electrode (Fig. 5.1a) and the combination electrode (Fig. 5.1b) which contains an inbuilt calomel reference electrode. Typical glass pH electrodes are made of thin glass porous membrane sealed at the end (the glass bubble) of a hard glass tube containing 0.1 M hydrochloric acid, into which is immersed a silver chloride-coated silver wire. The pH of the internal solution varies from 1.0 (by using 0.1 M HCl) to 7.0 (different buffers are used by different manufacturers). This silver/silver chloride electrode acts as an internal reference that generates a constant potential. The porous membrane is typically 0.1 mm thick, the outer and inner 10 nm consist of a hydrated gel layer that contains exchange-binding sites for hydrogen or sodium ions. On the inside of the membrane, the ion exchange sites are predominantly occupied by hydrogen ions from the hydrochloric acid, while on the outside, the ion exchange sites are occupied by sodium and hydrogen ions. The bulk of the membrane is a dry silicate layer in which all ion exchange sites are occupied by sodium ions. Most of the coordinated ions in both hydrated layers are free to diffuse into the surrounding solution, while hydrogen ions in the test solution can

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К	X			
		5.11.1	Instrumentation Analyzer	335
		5.11.2	Instrumentation Principle of an Elemental Analyzer	335
	5.12	V.Pau	Principle of an Elemental Analyzer Diffraction	-130
	.57.14	5.12.1	Diffraction	337
		5.12.2	Bragg's Law General Principle and Instrumentation	337
		5 12 3	Powder XRD Assex (FLISA)	338
	5.13	Enzyn		339
	2000	5.13.1	Types of ELISA	340
	5.14	Polym		342
	7000	5.14.1		545
		5.14.2	· · · · · · · · · · · · · · · · · · ·	344
		5.14.3	A PARTY OF THE PAR	344
	5.15	Electri	Carried State Affection of a superstant to the first state of the superstant to the	345
		5.15.1		346
		5.15.2	Factors Affecting Electrical Conductivity	347
	5.16	Geiger	-Muller Counter	347
		5.16.1	Descripte of a GM Counter	347
		5.16.2	Geiger-Muller Tube	348
		5.16.3	Geiger-Muller Detectors	350
		5.16.4	Factors Affecting GM Operation	352
		5.16.5	Advantages and Disadvantages of a Geiger Counter.	353
	5.17	Biosen	SOTS	354
	Refe	rences		357
6	Was	e Manas	ement in Scafood Industry	361
-	6.1	Seafood	d Waste Disposal	361
		6.1.1	Utilization of Solid Seafood Wastes	362
	6.2	100000000000000000000000000000000000000	rater Characterization	
	6.3		rater Treatment and Monitoring	
	- Access	6.3.1	Hydrolysis	
		6.3.2	Biodegradation and Bioremediation	
		6.3.3	Filtration/Screening	
		6.3.4	Miscellaneous	
	Dafor	ences		
	0.000		******************************	
7	Bioac	tive Con	npounds from Marine Sources	. 379
	7.1	Marine	Biopolymers and Derivatives	. 379
		7.1.1	Collagen and Gelatin	. 379
		7.1.2	Chitin and Chitosan	. 380
	7.2	Proteog	lycans and Glycosaminoglycans	38
		7.2.1	Proteoglycans	20
		7.2.2	Proteoglycans	. 38
	7.3		Glycosaminoglycans	. 38
	1000	7.3.1	Antrovident B. Antrovident B.	. 39
		7.3.2	Audovalgani Figinenis	30
	40	200000000000000000000000000000000000000	Amuoauant Polyphenols	20
	7.4	Scawced	- Conjuncting rates	- 38
		7.4.1	Agar, Carrageenan, and Alginate	39
				15 150

# Waste Management in Seafood Industry

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Waste management is a huge problem in all the realms of the world. All industries contribute to the mass of biodegradable and non-biodegradable waste, and seafood industry is no exception in this matter. Till the last decade, seafood waste found their way directly into the sewers and nearby water bodies. But the waste production in those days was not in the same scale as of today. Modern seafood industries had scaled up their production and produce much larger amounts of waste, most of which is not degradable at the rate of deposition. Hence, we must look for better technologies of waste management.

The solid waste from the industry including shells, stomach parts, and bycatches is now in huge demand by many industries. The liquid waste is always a headache with no takers. The industry management must find their own measures for getting rid of it. Most of them depend on reverse osmosis, aerobic, and anaerobic filters for parifying the wastewater.

### 6.1 Seafood Waste Disposal

Fish waste is often classified as a certified waste with high disposal cost because of high organic content (Knuckey et al. 2004). Most of the seafood processing units have effluent treatment plants (ETP) for discharging liquid waste effluents into the backwaters. In Cochin, India, alone, seafood processing units (87.5%) are depending on private contract for disposing solid waste. Solid waste is utilized for biogas production by 12.5% units. Many institutions are giving awareness programs about by-product valorization possibilities. The high nutritional quality and the possibility of by-product valorization from seafood waste have resulted in a share of the waste generated to be utilized for developing by-products. Shrimp shell waste gets a better price in the market (US dollar 1.098–1.32 per box) than finfish and cephalopod (0.77–0.88). They are mainly used for by-product development, and the major por-lion for by-product is contributed by cephalopod (19.4%) followed by shrimp shell (15.23%) and finfish (2.2%) waste (Sasidharan and Mathew 2011).

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100				
-			Instrumentation	335
		5.11.1	Instrumentation Principle of an Elemental Analyzer	335
		5.11.2	Principle of an Elemental Analyzes Diffraction	336
	5.12		Diffraction	337
		5.12.1	Bragg's Law General Principle and Instrumentation	337
		5.12.2	Powder XRD	338
	F 12	D.LE.S.		339
	5.13	5 13 1	Types of ELISA	340
	511	Dolum.		342
	5.14	5.14.1	Conventional PCR Technique	343
		5.14.2	### PROPERTY OF THE PROPERTY O	344
			A SALESTEE CONTRACTOR OF THE SALES OF THE SA	344
	5.15	Elastri.	The state Matter	345
	5.15	5.15.1	The state of the s	346
			* A Gastina Electrical Conductivity	347
	5.16	Gaigar	M. H. Counter	347
	3.10	5.16.1	Deinviola of a GM Counter	347
		5.16.2	Claiger-Muller Tube	348
		5.16.3	Goiger-Muller Detectors	350
		5.16.4	Factors Affecting GM Operation	352
		5.16.5	Advantages and Disadvantages of a Geiger Counter	353
	5.17	Diocen	SOLS	354
	Dafa	Dioscii		357
6	Was	te Manag	ement in Seafood Industry	361
	6.1	Seafood	d Waste Disposal	361
		6.1.1	Utilization of Solid Seafood Wastes	362
	6.2	Wastew	ater Characterization	363
	6.3	Wastew	ater Treatment and Monitoring	365
		6.3.1	Hydrolysis	365
		6.3.2	Biodegradation and Bioremediation	366
		6.3.3	Filtration/Screening	
		6.3.4	Miscellaneous	372
	Refer	ences	***************************************	
	Bioac	tive Con	apounds from Marine Sources	379
	7.1	Marine	Biopolymers and Derivatives	379
		7.1.1	Collagen and Gelatin	379
		7.1.2	Chitin and Chitosan	386
	7.2	Proteog	lycans and Glycosaminoglycans	387
		7.2.1	Proteoglycans.	387
		7.2.2	Glycosaminoelycans	388
	7.3	Antioxic	Glycosaminoglycans	. 300
	74.	7.3.1	Antioxident B.	. 391
		7.3.2	Andoxidant Figinents	39
	7.4		Antioxidant Polyphenols	200
	7.4	Scaweed	- or jource har lives	. 39
		7.4.1	Agar, Carrageenan, and Alginate	39

ontents			×i
	7.4.2	Fucoidan, Laminarin, and Ulvan	401
	7.4.3	Algal Polysaccharide Extraction and Processing	404
7.5	Antim		405
110,000	7.5.1	Antimicrobial Peptides (AMPs) in Marine	
		Invertebrates	405
	7.5.2	Antimicrobial Peptides (AMPs) in Marine	
		and Freshwater Fishes	406
7.6	Nutrac	reutical Peptides	411
	7.6.1	Antioxidant Peptides	412
	7.6.2	Antitumor/Cytotoxic Peptides	414
	7.6.3	Antihypertensive Peptides	414
	7.6.4	Cardiovascular Protective Peptides	415
	7.6.5	Neuropeptides and Neuroprotective Peptides	415
	7.6.6	Other Bioactive Roles of Marine Peptides	416
7.7	Marin	e Bioceramics	416
68.60	7.7.1	Hydroxyapatite	417
	7.7.2	Biosilica	420
Anne	ndix		
200000000000000000000000000000000000000			425

# Bioactive Compounds from Marine Sources

7

Over the past several decades, scientists have given increasing attention to marine organisms and the secondary metabolites they produce. Investigations on marine natural products have focused on areas like marine nutraceuticals, biopolymers, biofilms, CNS-membrane active toxins and ion channel effectors, antifouling, anticancer and antiviral agents, tumor promoters, anti-inflammatory agents, as well as metabolites that control microfilament-mediated processes. The marine natural products field is encouraging a multidisciplinary approach between biologists, chemists, and pharmacologists. It is also important to note that the number of compounds reported annually is increasing steadily, indicating that marine organisms will continue to be sufficient sources of natural bioactive substances.

### 7.1 Marine Biopolymers and Derivatives

Fish processing generates solid wastes (skin, scales, and bones) that can be as high as 80% of the original raw material and are excellent sources of high value products. The utilization of fish wastes helps to eliminate harmful environmental aspects of pollution and improve quality in fish processing. An important waste reduction strategy for the industry is the recovery of marketable by-products from fish wastes. The two most important marine biopolymers collagen as well as the polysaccharide polymer, chitin, and their derivatives gelatin and chitosan, respectively, are a promising entity in this regard.

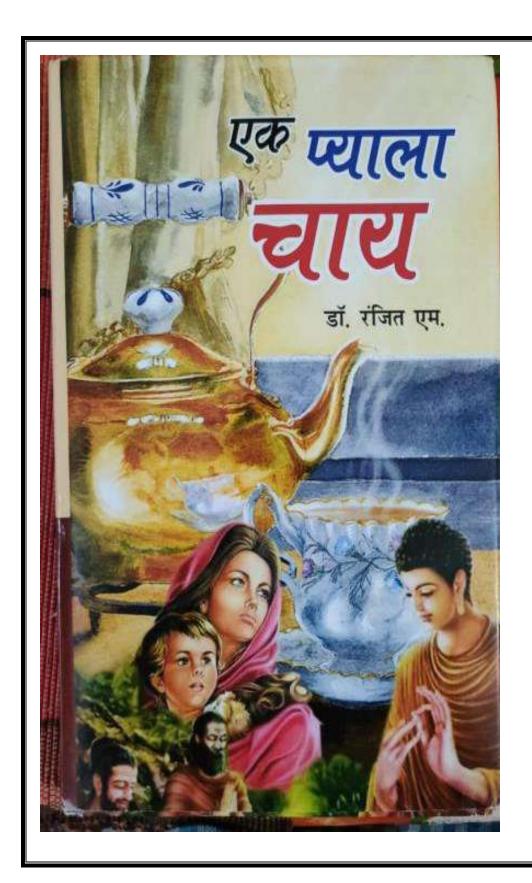
### 7.1.1 Collagen and Gelatin

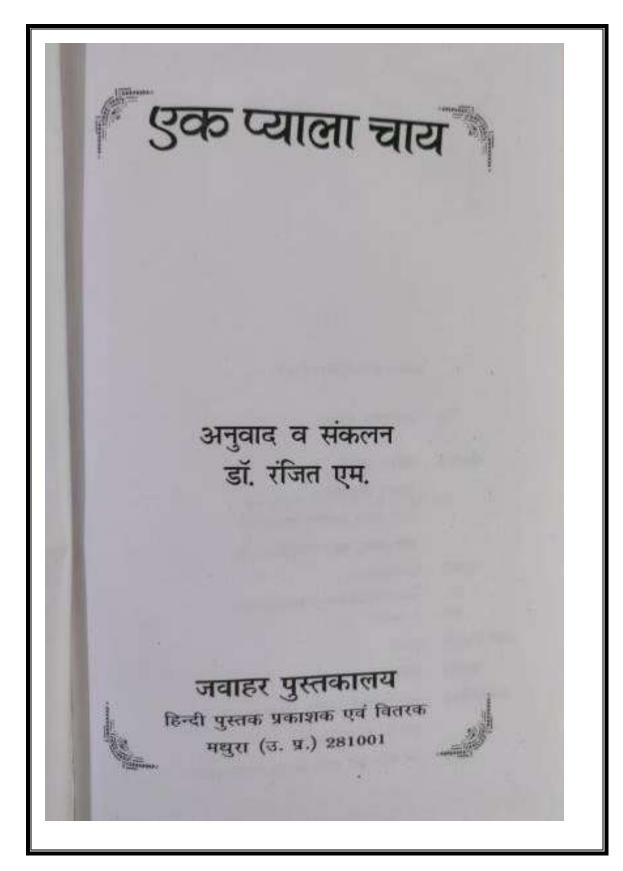
Collagen is the most abundant and ubiquitous protein in the body of almost all metazoan organisms, as a major component of extracellular matrix (Balian and Bowes 1977) and renowned as the most abundant protein in mammals, making up from 25% to 35% of the whole-body protein. Collagen in the form of elongated

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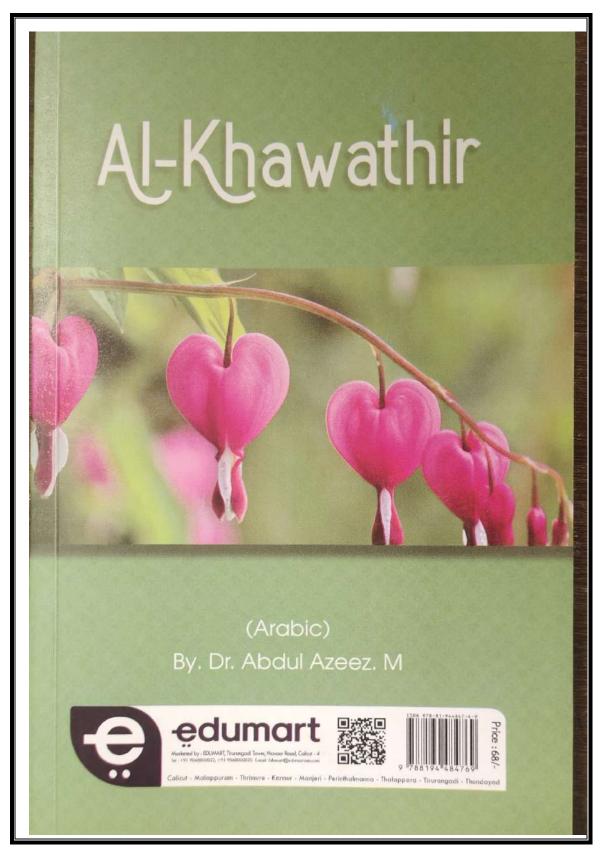
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## Al-Khawathir

(Arabic)

BA/BSc Third Semester Common Course Text Book

by: Dr. Abdul Azeez. M

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# المحتويات

0	مقدمة
٩	لمقابلةلقابلة
10	في المصرف
۲۱	"فمن رغب عن سنتي فليس مني"
۲٥	عشرُ وَصايا للنّجاح في الحياة العمليَّة
T9	مع العلماء
٤٦	حب الام
٥٧	شريح القاضي
٦٨	شمس النهار
Λο	طلب للوظيفة
AY	استعارم عن كتاب
AA	طلب للكتب
A9	.قانوره
91	MODEL QUESTION PAPER

### 1. From Ouran

Qarun was one of the people of Moses. He believed in Moses, read the Torah and improved it. God gave him a lot of money to test him. But he was a hypocrite and refused to pay zakat. He did not end with this, but rather incited the Children of Israel to disbelief and disobedience and accused Moses of adultery. He called a prostitute and gave her a lot of money to slander Moses. But it was announced that she had come on the orders of Qarun, and Moses had not committed adultery with her. Moses became angry and called upon God, his Lord, to punish him, so God caused the earth to swallow him and his money

- 2. Hadiths
- 1. An action is not valid except with intention, and a person receives benefits and harm from his action according to his intention
- 2. Ihsan is for the servant to obey his Lord sincerely, submissively, and humbly as if he were seeing Him. Because God is aware of his secret and his revelation
- 3. The sweetness of honey

It is said that a man was walking in the jungles of Africa, where the nature is picturesque and where tall trees grow, due to its location on the equator. He enjoyed the view of the trees blocking the sun's rays due to their density, enjoyed the singing of birds, and inhaled the fragrance of the flowers that produced pleasant scents......

4. Abu wada's marriage

Abu Wada'ah said: I used to frequent the mosque of the Messenger of God in pursuit of knowledge. I used to go to Saeed bin Al-Musayyab's group, and people would crowd there with horseshoes... Then I was absent from the Sheikh's group for days, so he checked on me and thought that I was sick, or had a symptom... So he asked those around him about me, but he did not find any news from any of them.

5. Macbeth- William Shakespeare

First scene

6. Motherland

But it is time to forget people's hatred. He builds a structure on the basis of brotherhood. But it is time for the disappointment to be cast aside. You gain honor by supporting nations....

7. Why did you complain?

How often do you complain and say: You are destitute? The earth is yours, the sky and the stars are yours, and the fields, their flowers, and their fragrance are yours.

8. The art of speech

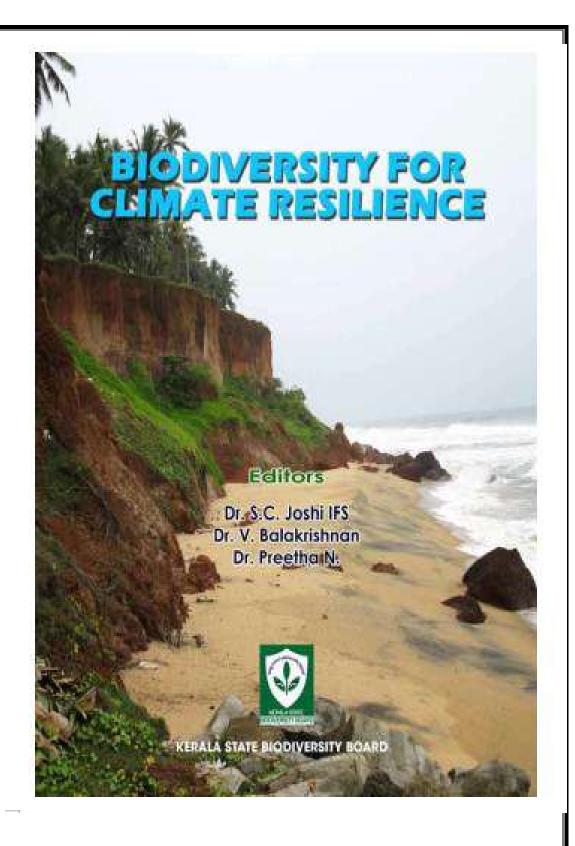
Man, as they say, is a talking animal. Speech is not to come out and describe speech, but rather to know how to speak, and perhaps a word enters Paradise, and a word enters Hell, and a word is saved from killing, and a word pushes its owner to killing.....

9. Happiness makers

Chinese legend tells us that an old man wanted to know the difference between happy people and unhappy people, so he went and asked one of the wise men, saying: Will you tell me what is the difference between happy people and unhappy people? She led the sage to a large palace. As soon as he went down to the hall, he saw many people with tables full of delicious food spread out in front of them. Their bodies were thin, and signs of hunger appeared on their features. Each of them was holding a huge spoon, four meters long, but they could not eat. So the sheikh said to the sage. : I knew these people: they are the unfortunate ones

10. The art of diction

Delivering is the art of addressing the audience and influencing them, and we have expressed it with the word art because it can be developed with effort, and actual practice becomes a skill. Addressing the audience is with spoken words and influencing them is with sincere emotions, feelings, and feelings. Art in this is accompanied by expressive looks, clear movements, influential suggestions, and auxiliary means



#### **Biodiversity for Climate Resilience**



[This book is a compilation of the papers presented as part of the 1st Kerala State Biodiversity Congress held during 2018]

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#### CONTENTS

#### Best Practices of Biodiversity conservation

- People's action for Rejuvenating lost waterbodies The Aadi Pamba Varattar Story - 5
- Jalasamrudhi A Modal Initiative on Water Conservation -12
- Best Practices in Biodiversity Conservation: A Case of M. S. Swaminathan Botanic Garden in Wayanad, Kerala -17
- Yaongyimchen Community Bio-Diversity Conservation Area , Nagaland 29
- Hornbill Monitoring to Ecological Monitoring One and Half decade of Indigenous community Based Conservation and Monitoring of Endangered Rainforest Species and Habitat in Western Ghats -35
- 6. Best Practices in Agrobiodiversity Conservation for Climate Resilience 41
- Best Practices on Biodiversity Conservation in Rice Ecosystems of Kerala 46

#### **Biodiversity Conservation Priorities**

- Agrobiodiversity Conservation: Participatory Management Systems in Small Millets - 53
- 9. Agro-biodiversity: Status, Trends and Conservation priority 55
- 10. Vilwardi Cattle Breed; An Epitome of Biodiversity Conservation 60
- Protection and Conservation of Agro-Biodiversity- Strategies and Practices 63
- Circumventing the shortfalls in aquatic biodiversity documentation of Kerala and prioritizing research: The Way forward - 68
- Ecorestoration and Biodiversity Conservation of Riparian Forests Along the Chalakkudy River, Southern Western Ghats -72
- Impact of Flood on Threatened Plants in Kerala State; Humboldtia Bourdillonii- A case Study - 77
- An action plan to mitigate the impacts of climate change on the native biota of Kerala (India): A proposal with special reference to butterflies
- Prakriti Bus: A Mobile Exhibition for Raising Awareness on Biodiversity of Uttar Pradesh - 97
- 17. Connecting Biodiversity and Climate Resilience- Way foreword 105

## ECORESTORATION AND BIODIVERSITY CONSERVATION OF RIPARIAN FORESTS ALONG THE CHALAKKUDY RIVER, SOUTHERN WESTERN GHATS

#### Amitha Bachan K.H1 and Pooja Suresh2

Assi. Prof & Research Guide, Research Department of Botany MES Asmabi College & Founder member Western Ghats Hornbill Foundation

PhD Fellow, Research Department of Botany MES Asmabi College

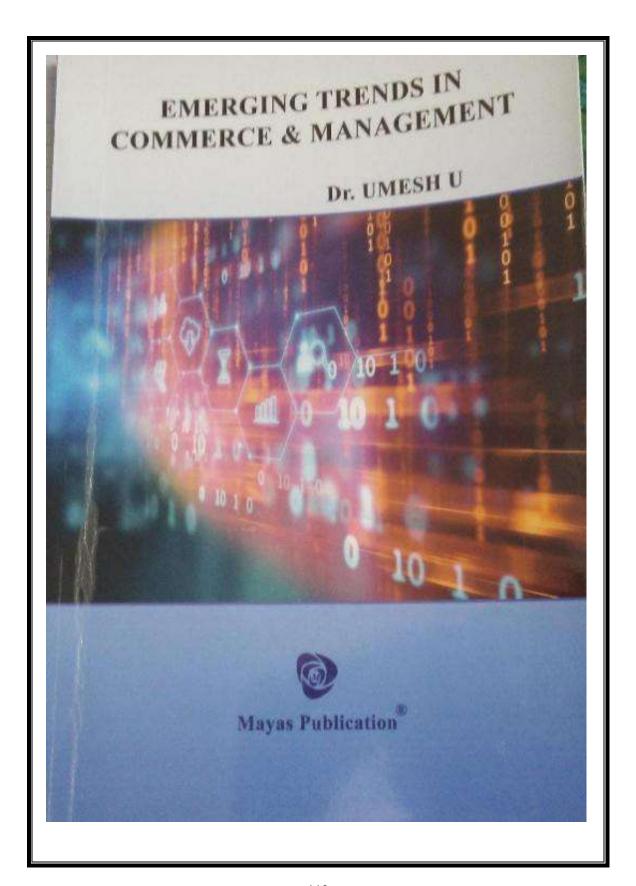
#### **ABSTRACT**

This article elucidates the studies and conservation intervention on the Riparian Forests and vegetation along the Chalakkudy River in the Anamalai part of Southern Western Ghats as a pioneering work in India. A methodology developed through the process has been used for understanding heterogenic community composition along bioclimatic gradient useful for classification and ecorestoration. The methodology has application in other forest and wetland ecosystems and is being applied in collaboration with various state agencies including Kerala State Landuse Board, Kerala Forest Department and Kerala State Biodiversity Board. The ecorestoration protocol prepared in detail for Chalakkudy River has been added to the working plan of the Forest Department in the Vazhachal Forest Division.

#### INTRODUCTION

Chalakkudy River is the fifth longest and most fish diverse river in Kerala (NBFGR, 2000). The river is originating from the Anamalai landscape unit of southern Western Ghats covering Nelliyampathy, Parambikulam valley, Valparai- Malkkaparaiplatue, Sholayar valley and Vazhachal- Athirappilly forests. The rich fish diversity in the river is a reflection of availability of different bioclimatic regimes (Dry Deciduous, Moist Deciduous, Wet Evergreen, Evergreen, Dry Evergreen, Semi evergreen, Low elevation evergreen) and availability of river stretches in 6-7 altitudinal planes with good amount of Riparian vegetation and riverine micro habitat (Bachan et al., 2014).

The catchment forests of Chalakkudy River within the Anamalis considered as one of the hottest hotspot (Nayar, 1996; Bawaet al., 2007) in terms of biodiversity with in the Western Ghats Sri Lanka biodiversity hotspot. The riparian forest along the river is very unique in its structure and floristic composition with good number of endemic and threatened flora and fauna (Bachan and Pradeep, 2015) the low elevation evergreen riparian forests in the Vazhachal - Athirappilly region (50-350m Elevation) has been recognised as unique ecosystem because of unavailability of similar vegetation across the Western Ghats (Bachan, 2010; Bachan and Pradeep, 2015). The presence of true evergreen flora, nesting of three Hornbills especially Great hornbills, Malabar Pied Hornbills and many endemic and endangered flora and fauna indicates its biological significance.



# EMERGING TRENDS IN COMMERCE & MANAGEMENT

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### Dr. UMESH U



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Lidition First

15.	Make in India - An Innovative Project to Boost Digital Infrastructure  Jaseena KB & Jaseela KB	131-13
16.	Service Quality and Customer Satisfaction of Indian Mobile Network Providers - Special Reference to Kodungallur Municipality - In Kerala Girish M.C & Dr.Reji M.A	137-151
17.	Stressed Assets In Indian Banking Industry - Evaluation Of Crisis In Co- Operative Banking Sector Remesh K & Dr. Umesh U	152-159
18.	Evaluation of Institutional Support in Entrepreneurial Development among the Tribal People of Attappadi Block Swapna K & Dr.Jagadees Chandran G	160-169
19	Cashless Economy in Rural Kerala With Special Reference to Kadukutty (Rural) Grama Panchayar, Chalakudy Dr Princy Francis	170-181
20	A Critical Study on Impulse Buying Behaviour of Women in Mananthavady Taluk of Wayanad District, Kerala Rajitha Xavior & Dr.Umesh.U	182-188
21	A Study on the Significance of Green Accounting in the Cultural Capital of Kerala – Thrissur Remya S & Dr. G.S. Sandhya Nair	189-197
22	Behavioural Finance - An Overview Robin Abraham & Genoy George	198-205
23	A Study on the Effect of Monetary and Non-Monetary Sales Promotion Tools on the Consumption of Cosmetic Products With Special Reference to Vadakara Taluk in Calicut District in Kerala Muhammed Salim K.C. & Dr. G. Deepa	206-218
24	Gradeate's Employability Skills - A Study on Kerala Context Shemeer Babu, I & Dr. Zobetha	219-226
25	Employee's Competency Skill at Private Sector Banking Sudhersh Kumar K. & Dr. A. M. Viswambharan	227233

### CASHLESS ECONOMY IN RURAL KERALA: WITH SPECIAL REFERENCE TO KADUKUTTY (RURAL) GRAMA PANCHAYAT, CHALAKUDY

Dr Princy Francis

HOD & Assistant Professor

P.G. Department of Commerce

M.E.S. Asmabi College

(Aided by Govt of Kerala & affiliated to Uty of Caticus

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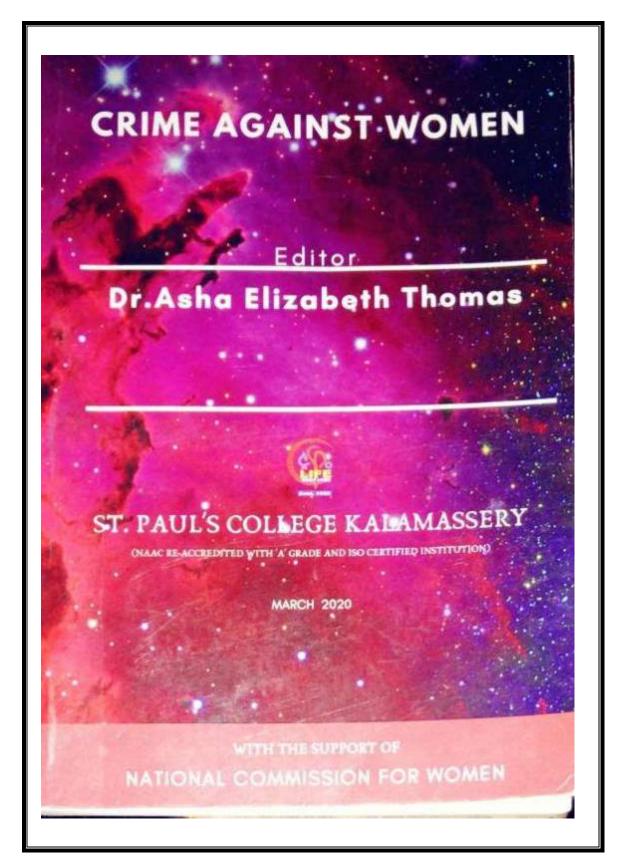
#### ABSTRACT

India would like to be a cashless economy to reduce black money and fake currency. It is also useful to control tax avoidance. This paper is motivated by knowing the status of cashless economy rural area of India. The objective of the study is to know the public perception about the concept of cashless economy and try to understand the financial status, interacy in education, finance and technology of rural Kerala. Descriptive study has been done in rural Kerala by using percentage analysis and descriptive statistics like mean score. It also focuses on to know gender difference among Kerala rural people about the worrness of becoming cashless economy. Here 186 people are selected to make this study in a most effective way and suggests that what are the points to take into consideration to assure the wide spread of cashless economy in the rural areas of Kerala. It is also found out that thee are no gender differences about the cashless economy by doing t-test.

Keywords: Cashless economy, Rural Kerala, India, financial literacy, financial inclusion, online banking, technology in banking.

#### LINERODUCTION

Cash is like blood in our human body, a basic necessity without which survival is a problem. As a whole, about 85% payments are made in each because of the flexibility of the notes and come. The digital employees antroduces new methods of payment system at the time. A report by Boston Consulting Group (BCG) and Google India revealed that last year around 75 per cent of transactions in India were cash based, while in developed nations such as the US. Japan, France, Germany etc. it was around 20-25 per cent Government of India pointed out the importance of conflow economy to overcome terrorism and other illegal activates. Cashleso leads India to make



## With the support of NATIONAL COMMISSION FOR WOMEN

Contemplations on 'Crime against Women'- Collection of Peer Reviewed Articles presented in the 'Two Day National Seminar on Crime against Women: Technology and Crime against Women' organized by St. Paul's College, Kalamassery with the support of National Commission for Women on January 13-14, 2020.

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#### Dr. Asha Elizabeth Thomas

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## Contents

1.	Cybercrimes against Women and Legal Perspectives 01  Adv. Emil Stanley
2.	United Nations and the Status of Women
3.	Recent Changes in the Sphere of Domestic Violence against Women in India
4.	Violence and Harassment against Women in the Workplace
5.	Gendered Violence in Everyday Life of Kashmiri Women: A Study of Militarization in Freny Manecksha's Behold, I Shine: Narratives of Kashmir's Women and Children
6.	Endosulfan, Women's Health and Livelihoods – A study of socio-economic impacts of pesticide use in Kasargod District of Kerala
7.	Sugaring the Sugar Babies: Reconnoitring Violence in 'Seeking Arrangement'
8.	Cyberstalking
9.	Domestic Violence against Women
10.	Castigation of Victims: Sororophobia in Ovid and Rape Culture in Haryana

## DOMESTIC VIOLENCE AGAINST WOMEN

## Ms. Shiney C N Ms. Hafla Ahammad Habeeb

### Introduction

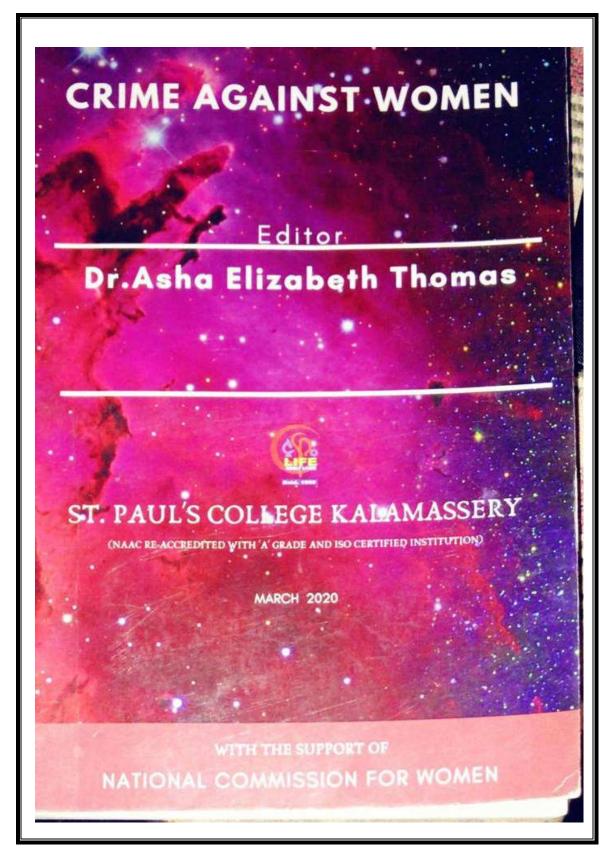
Violence against women, materialization of a historic unequal power relation between sexes is a form of discrimination and mistreatment of women which results in physical, psychological and socio-economic costs to women and society as well. Violence implies destruction, anger and pain while family suggested the qualities of caring, love and joy. Domestic violence occurs at all familial level-between couples, siblings, in parent-child relationship, and often times, dating relationships. Women and girls face violence at home, in school, on the street, at work, on public transportation and online. They experience violence in times of peace and times of conflict or war.

### Objective of the Study

- a) To assess the level of domestic violence suffered by the women in Kodungallur taluk.
- b) To analyze the major factors that causes domestic violence.
- c) To know the reason for compromise in domestic violence.

#### Statement of the Problem

Of all the crimes against women, domestic violence is the most important. All the time women suffered from discrimination, oppression, exploitation, degradation, aggression and humiliations not only from their family members but also from the society. Only when the family and society are democratized, the status of women is strengthened. Women should be considered as equal to men not only at public places but also at their own home. They should have adequate control over their own resources.



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	Cyber Crime against Women and Children in India Ms. Dhanusree Ullas K.	1(	2.	A Pr
12.	Sexual Objectification through Virginity Blood Capsules: Reshaping Old Myths of Virginity Blood	11/2:	3.	W
13.	and a Day Could Media: Theories the #	15		M
14.	Security Awareness Level of Women Smartphone Users			ers
	Mr. Bharathan Syam & Mr. Sreenu K.S.			G
15.	Awareness and Perception on Digital Safety and Security among Internet Users with Reference to Girl students		5.	(G)
	Ms. Deepa K A & Ms. Athira A. A.			
16.	A Study on Driver Distraction Detection	13		
17.	Women Empowerment through Online Jobs in the Digital Economy	15		
	Ms. Aparna Nelson			
18.	Rising Textile Industry in Kerala and Women Entrepreneurship	16		
Table 1	Dr. Sumitha Franklin & Ms. Asna T.A			
19.	Ms. Lincy P. T. & Mr. Jackson D'Silva	17		
20.	Women and Technologically Advanced Indian society  Ms. Ruby Stanly E.	18	A Line	
21.	Women and Social Media: Is Introducing New Security Options the Real Solution to the Problems faced by Women on Digital Platform?  Ms. Gouri R.	19		

# AWARENESS AND PERCEPTION ON DIGITAL SAFETY AND SECURITY AMONG INTERNET USERS WITH REFERENCE TO GIRL STUDENTS

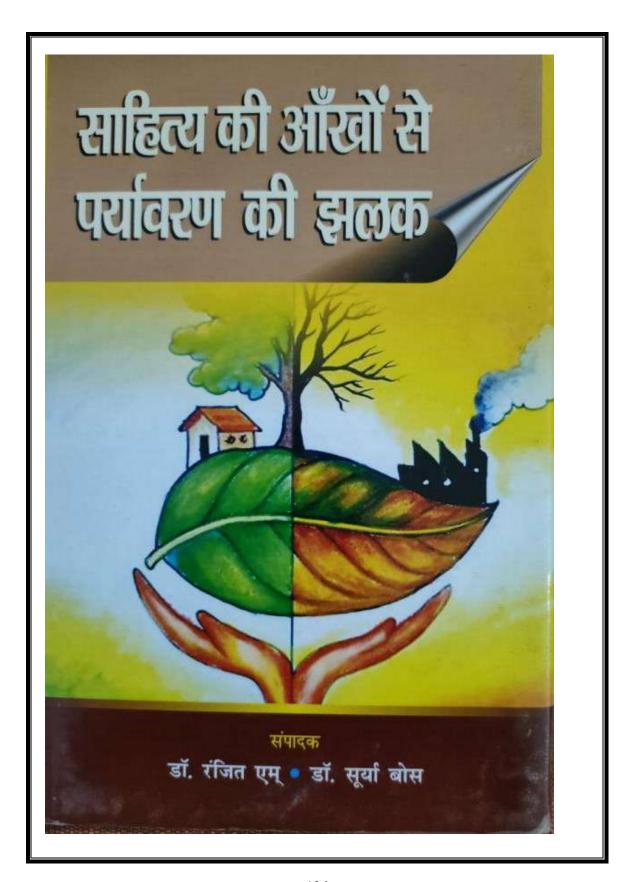
Ms. Deepa K A Ms. Athira A A

### Introduction

In recent years the usage of internet technologies has expanded and for most people the internet is a very present factor in everyday life. Internet has become a part of our children's daily activities at home and at school. The benefits of the Internet for children are huge and include education an entertainment. However, the same technologies also pose some risks that parents need to identify and guard against. A lack of awareness can cause children to encounter serious danger and become victims of Internet criminals.

As the internet usage by the children and teenagers increases, so do the concerns about their online safety. Providing a safe environment requires an in depth understanding of the types and prevalence of online risks young internet users face, as well as of the solutions most effective in mitigating these risks. Despite the very significant amount of research that has been conducted regarding these risks, improving child/youth internet safety remains a challenge. The perception of online risks for young people is often attributed to adult predators, whereas studies show that cyberbullies are likely to be in the same age group as their victims (Whitaker and Bushman, 2009).

There are many concerns for the safety of young people accessing the internet for social networking purposes. While the internet offers many benefits and opportunities for adolescents, it is also the source of many potential threats, including exposure to



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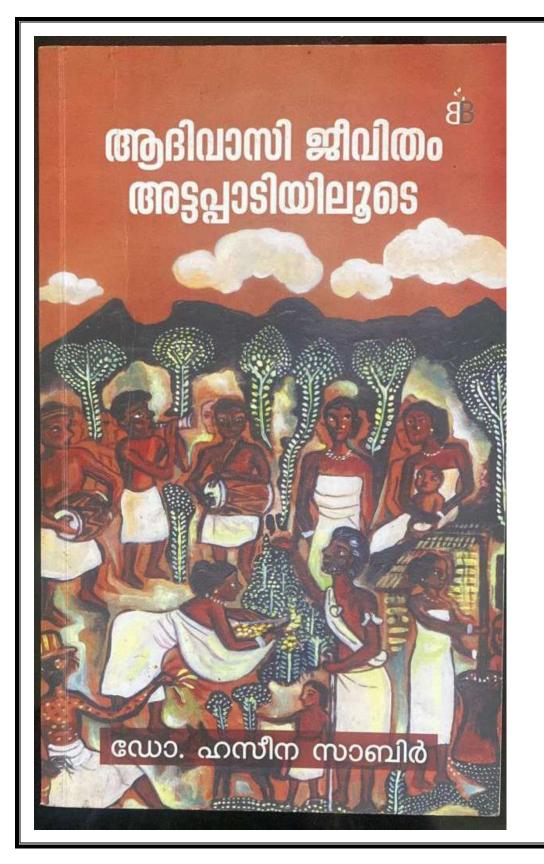
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A prescribed text for first semester (Course ENG 1 A02) Common Course in English for all UG Programmes)

> Dr. Muralikrishnan T.R. Sabitha M.M. Lekshmi S.



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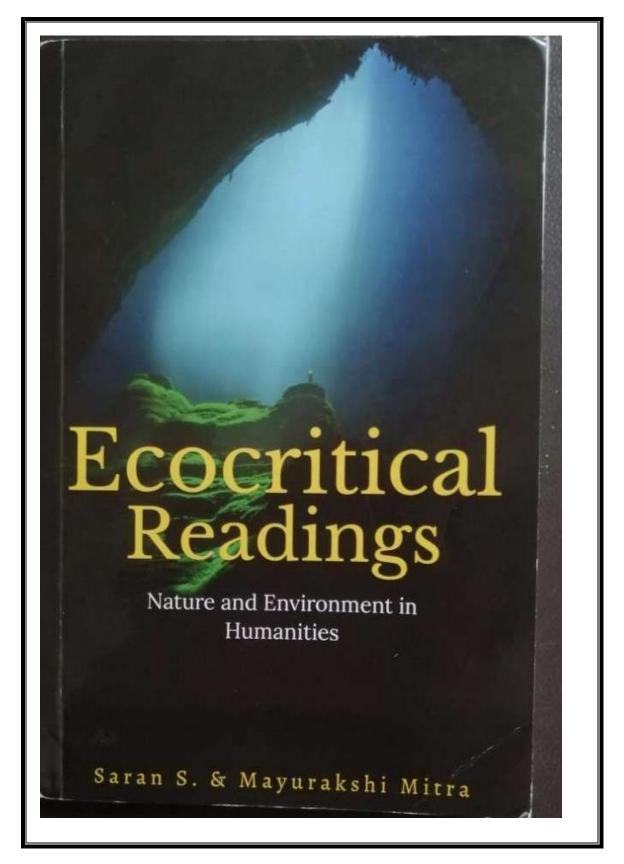
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## Contents

Foreword	W.
Editor	vii
Editor	(x
Contributors	ME.
Introduction	XV
1. Ecofeminism: Moving Towards A Sustainable	1
Environment	
2. Economic Importance Of Forests And Forest Reserves In	110
Jammu And Kashmir	
3. Nature And Indian Culture As Reflected In The Felling	22
Of The Banyan Tree By Dilip Chitre	
4. Environment And Culture Of Bengal In Jibanananda	30
Das's Rupasi Bangia	
5. The Importance Of Nature Based Solutions In The Post	40
Govid 19 Scenario	
6. Ecotourism	53
7. Living Ecosystems: Culture And Identity Of Select	67
Characters In 'gift In Green' And 'the Hungry Tide	
8. Screening The Green : Ecocritical Rereading Of The	78
Malayalam Film Lord Livingstone 7000 Kandi	
9. Framing Realism And Magical Realism As Means To The	204
Emergence Of Women As Empowered Beings: A Study	
in Relation To Thappad And Bulbbul	
10. Transgressing The Thresholds: An Eco-feminist Reading	g 111
Of Mahasweta Devi's The Hunt	
11. Ecocriticism In Madhuram Gayati	120

#### CHAPTER IX

## Framing Realism and Magical Realism as Means to the Emergence of Women as Empowered Beings: A Study in Relation to Thappad and Bulbbul

Sinsy Siddiq
Assistant professor, Department of English
M. E. S. Asmahi College, Trichur

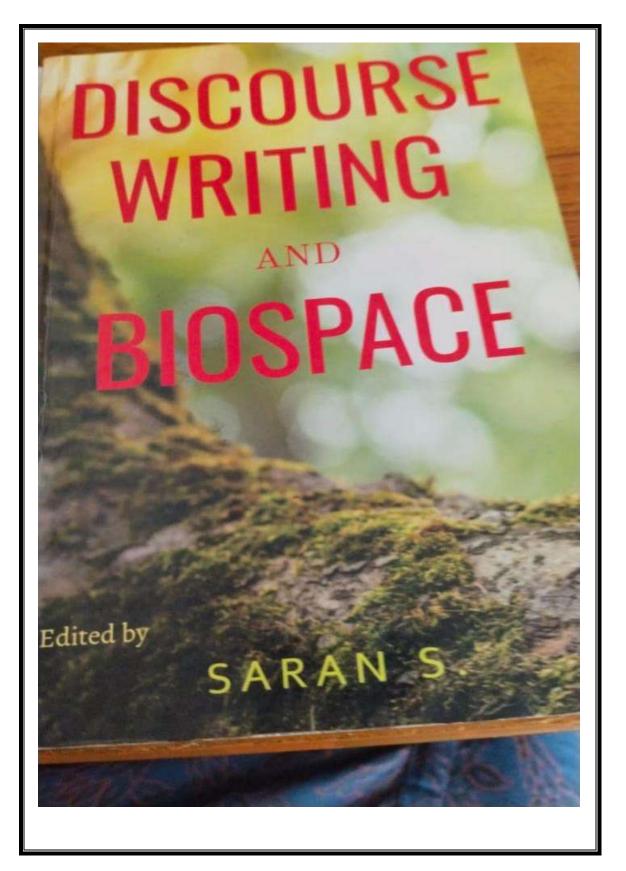
#### Abstract

Anubhay Sinha, director of the movie 'Thappad' is also a producer and writer well known for a handful of good movies. The movie underlies the fact that each woman has an identity of her own which cannot be intruded and banished. They have all freedom to light for their rights in a country like India. Bollywood has brought about several strong characters out of women which include historical lightes like' Padmavat' to ordinary women like in tPink'. The director of 'Bulbbul' a lady herself is an indian dialogue writer, lyricist, screenplay writer and story writer. Clearly portraying a woman's journey from innocence to strength and courage, she could get a and effective output from the movie. These two movies embedded with the theories of realism and magical realism in this particular feature. To show how reality is different from magical world in which many women are still stuck and cannot find their way outside.

Keywordsi realism, magical realism, women empowerement, sexual harasament.

...

Women, considered as one of the weak stratas of the society has always been drawn towards the 'dim light' Ecocriticism is an inclusionary term that is most commonly used to refer to environmentally oriented study of literature, art and other media. Life with the harmony of nature and environment is an integral part of human life. Many ancient cultures have advocated life in harmony with environment. Many of the rituals i.e. the worship of trees, animals, forests, rivers, and the sun, and considering the earth itself as Mother Goddess may seem meaningless in this modern era. But these rituals and culture have connected humans with environment from ancient ages. It tries to bring a balance between shallow ecology or anthropocentric approach that advocates conservation of nature and natural resources as against deep ecology that advocates preservation of nature. In the last few decades, this theory has grabbed the attention of scholars and has proved itself to be an interesting field of investigation in literature. It becomes essential to the human being, as the readers of literature, to know the theory and the various fields involved in it. Human life can neither be away from the environment nor from the literature. The theory 'ecocriticism' reflects on the relationship between environment and human life. Saran S. Mayurakshi Mitra **Edit Academic** May 2021



Conten	its
pareword	
Editor	
Introduction	- te
Contributors	- AC
Leslie Marmon Silko's Gardens	rican Green Politics In 1
2. Self-annihilation To Self-affirm Biome In Anthropocene	ation: The Coalescence O(1)
3. Reading Coleridge's The Rime And D. H. Lawrence's Snake F Perspective	Of The Ancient Mariner 20 rom A Zoocritical
4. Post- Covid Digital Era	28
5. Writing On The Biospace: Th	
Bodyspace And Geospaces Ir Shantaram	
6. Persecution Of Women In T Sri Ganesh: Mahasweta Dev	
7. Collapsing And Rebuilding: Unnahar's Yesterday I Was	The Moon
8. Djinn As Elements Of Horr Existential Crisis And Port	or And Fantasy In Films: 63
o Feminist Reading Of L N T	olstoy's The Kreutzer Sonata 71
And D H Lawrence's Sons	And Lovers
10. Shifting The Paradigms Of	f Representation: A Study On 80
The Films Of Anjali Meno	ormation Of The Life Narratives 9

Contents	
12. Literary Response To Pandemic: An Anthropocentric Analysis Of The Stand	щ
13. Shaikh-ul Aalam As An Eco-critical Poet  14. Bama's Voice In Thwarting The Triple Monsters:  Mapping Her Struggle Through Sangati	140 146
15. Annihilation Of Caste: Ambedkar's Dream Unfulfilled 16. Deconstructing Masculinity And Reinforcing Femininit The Double Standards Underlying South Korean Popula	DO: 122
Culture  17. Nature And Women: Discourses On Ecofeminism In The Mistress Of Spices By Chitra Banerjee Divakaruni	ie 172

## Djinn as Elements of Horror and Fantasy in Films: Existential Crisis and Portrayal

Assistant Professor, Department of English M. E. S. Asmabi College, Trichur

In the Beginning, Three were Created. Man made of Clay. Angels made of Light. And a Third ... made of Fire,

In modern age, the all powerful and mastering creation called In mouch a least altogether forgotten an existence on earth called the 'jinn'.

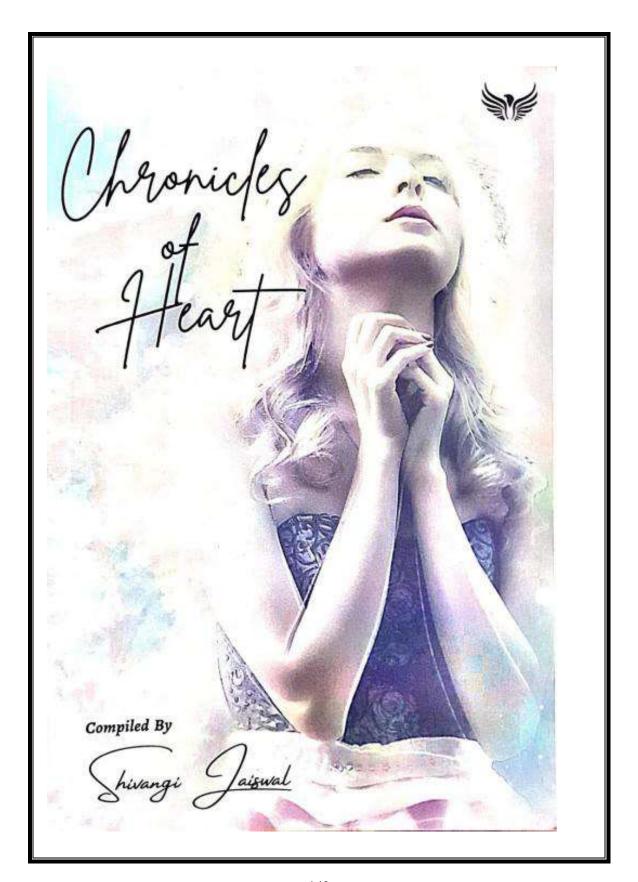
MAN has altogether forgotten an existence on earth called the 'jinn'. MAN has alrest indulging with the concept of angels though.

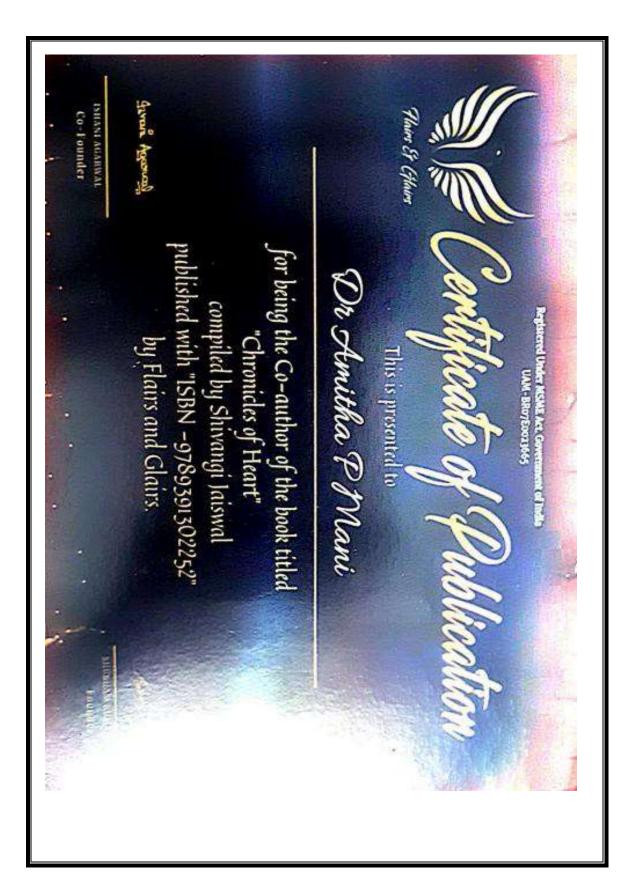
They are constantly indulging with the concept of angels though. They are considered in myths, the jinn continued made of smokeless fire, as believed in myths, the jinn continued Made of Silicon the species of man in a way; good or mean. Wild to influence the species regarding man and fantasies regarding man imaginations and fantasies regarding man and angels have imagination and into our thoughts that the existence of the third creation has been nearly wiped off into oblivion. The fact should not be forgotten that they cross our paths quite in unusually usual ways, not making evident their presence. But do not be carried off by a slight shiver or goose bumps travelling through your body; the race exists but not without any intension on earth.

Keywords: Djinn, fantasy, magical realism, hallucination, horror.

Jinn(meaning spirit or demon, depending on source) are meant to be supernatural creatures in Islamic Mythology .Like humans, they are believed to be created by natural conception; neither born as believers nor as unbelievers, but their dispositions depends solely on either God's guidance or human influencers or black

The book "Discourse, Writing and Rio Space" gives a meta-analysis of writing and writing pedagogy theory and research, distinguishing discourses in Media Literacy and Identity, Geospatial humanities, Digital Humanities, Media Ethics, Communication for Development, Governance and Policy Making, Post-Covid Digital Era, Feminism and New-Feminism, Film Theory, Eco-critical Studies, ICT and ELT and Cultural Studies. It introduces and describes a framework for analysing educational data regarding writing pedagogy in which linkages are formed between perspectives on language, perspectives on writing, perspectives on learning to write, perspectives on teaching writing, and perspectives on writing evaluation. A core notion that writing consists of applying knowledge of a set of linguistic patterns and rules for sound-symbol interactions and sentence formation underpins much of literacy education policy and practise. At its most extreme, this is the view that writing is a single, context-free activity in which all writing follows the same patterns and principles regardless of text type. Edited by Edit Academic. July 2021 Price Rs 700.00







# Realizing the Basal: The Pandemic Impact

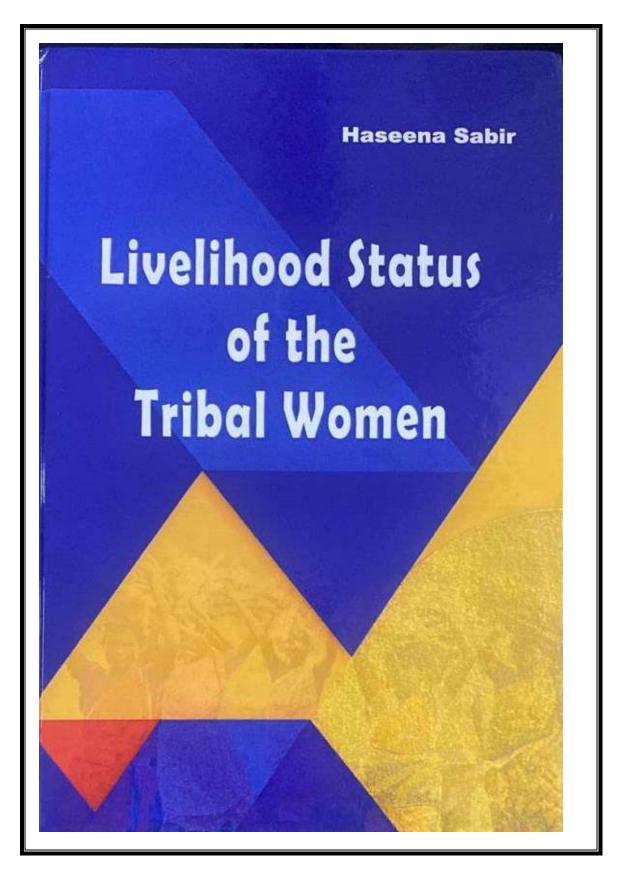
Though she was a firm believer, her concept of God was not acceptable to the family. It was a traditional Hindu family that performed routine temple visits, holy rites, usual chanting and fasting. For her evening is the time she got to work hard for her studies and do her daily chores. She was used to abstain from the evening temple visits as it spoiled her whole day. Can the loud reciting bring sanctity to soul or peace to the mind? For her, the perfect homework for the next day enabled her to work for a better tomorrow. One needs to be loyal to the customary practices in the family, otherwise the family muse would not stand with her at the time of crisis. For the rhetorical question, can anyone stand with one's inner self at any crucial juncture, the answer is an emphatic 'no.'

Self-help and appreciation are the best things one can do for inner peace; on the other hand, this will lead to genuine humane feelings discarding the mundane performances. At that time the lockdown was declared as an impact of Covid 19. With the other shutting downs, places of worship were also closed. That which was lost by the family members by not going for these regular visits was the darkness that covered the mind, though occasional visits turn out to be good to eliminate the negativity as believed by her. Thus, she got perfect opportunity to go back to her real self, read and understand a lot along with the family. The period taught that worship of God need not be displayed, but can be done in mind, for such people work itself is worship. She counted these among the very few benefits of the pandemic period.

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# Livelihood Status of the Tribal Women

Dr. Hascena Sabir

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Edited & Compiled by Sinilal B., Dintu K.P. and Sofia S.

IVCPB 18

Priming mediated biotic stress tolerance in Curcuma longa L.

T.R. Athirat and K.C. Jisha:

PG and Research Department of Botany, M.E.S.Asmabi College, P. Vemballur, Kodungallur,

Kerala, India

Seed priming is an effective method to enhance germination and growth under stressful

conditions. The effects of different rhizome priming techniques namely Hydropriming, Halopriming

and Chemical priming on the emergence, growth, and resistance in Curcuma longa-

L. were investigated in this study. In this study, the most effective reagents were used, together with

pre-optimized concentrations based on early studies. Three different turmeric varieties, namely Prabha,

Prathibha, and Pragati were primed and allowed to grow in grow bags along with the control rhizomes.

Rhizomes were treated with 250Mm NaCl for 12 hours during halopriming. Rhizomes were hydro-

primed for 12 hours using distilled water. Chemical priming involves treating the rhizome with

different concentrations of potassium nitrate [50Mm, 100Mm, 150Mm, 200Mm, 250Mm, 300Mm]. R

hizome primed with 200Mm KNO3 showed the highest growth rate. They also showed the highest

chlorophyll content. Moreover, the overall growth of plantsis enhanced due to the seed-priming

treatments. Proline concentration was significantly higher in KNO3 primed plants and MDA content

was higher in the halo primed variety. Proline levels increase in the turmeric leaves in response

to increased stress conditions and help in stress tolerance. Most halo and hydro-primed plants are

disease-prone however, no disease has been found in the KNO3 primed plants. As a result, chemical

priming provides greaterdisease resistance than other primed plants. The present study suggested that

chemical priming with potassium nitrate is an alternative and more effective method to increase

tolerance infurmeric varieties when exposed to different biotic stress conditions.

Keywords: Turmeric, Hydropriming, Halopriming, Chemical priming, growth parameters, Disease

resistance

150



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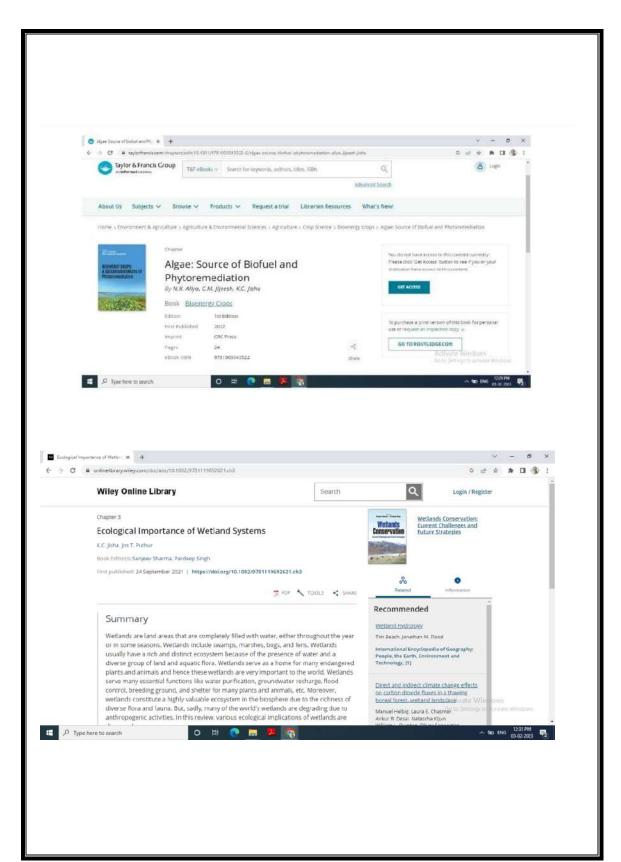
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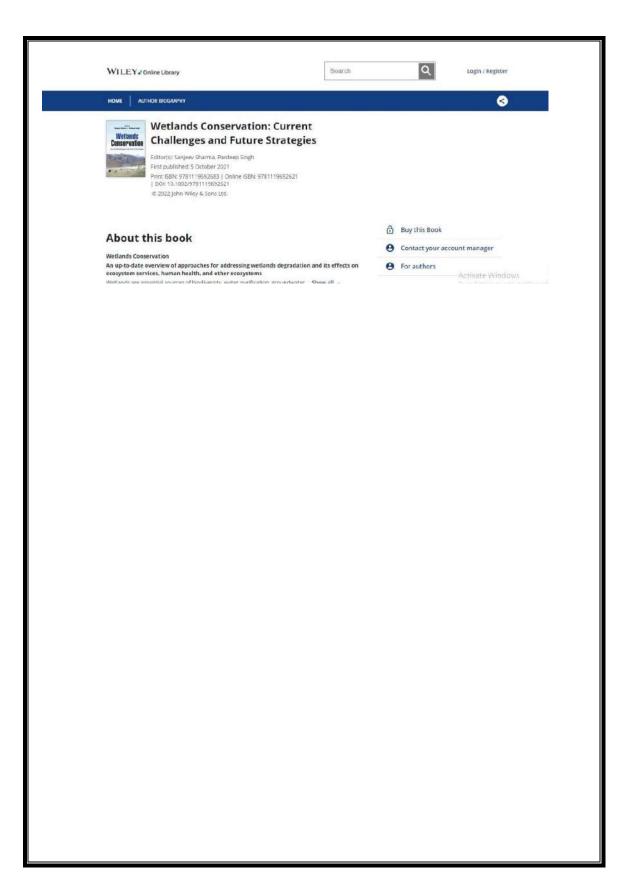
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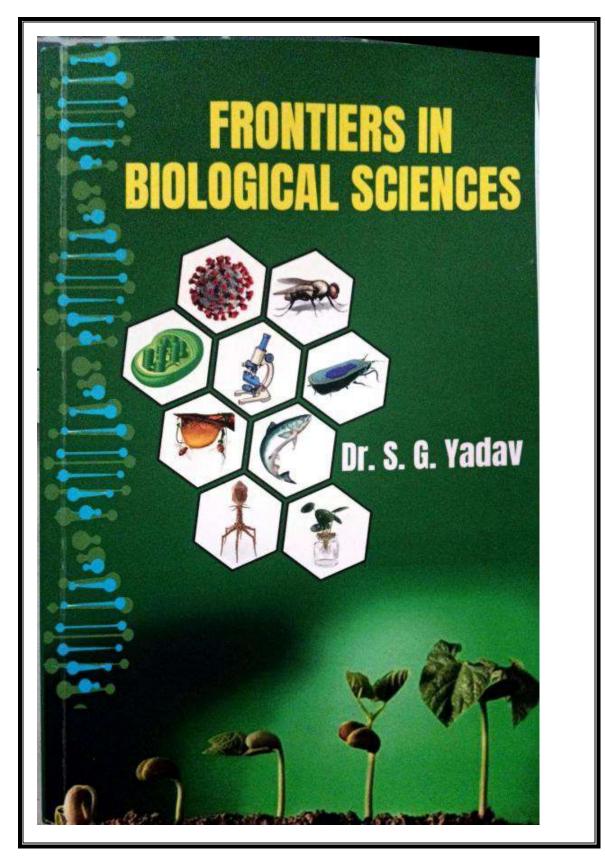
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All rights reserved. No part of this may be reproduced, transmitted or stored in a retrieval system in any form or by any means without permission granted from the Department of Botany, Fatima MataNational College, Kollam. Enquiries in this regard may be addressed to botany@fmnc.ac.in







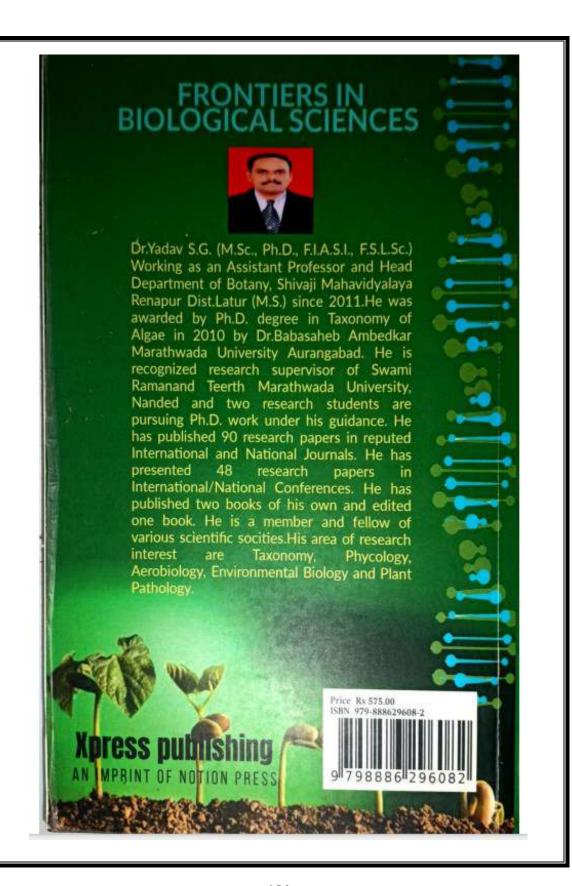
# BIO-PRIMING: A REVOLUTIONARY THOUGHT AGAINST CHEMICALS-BASED CROP IMPROVEMENT

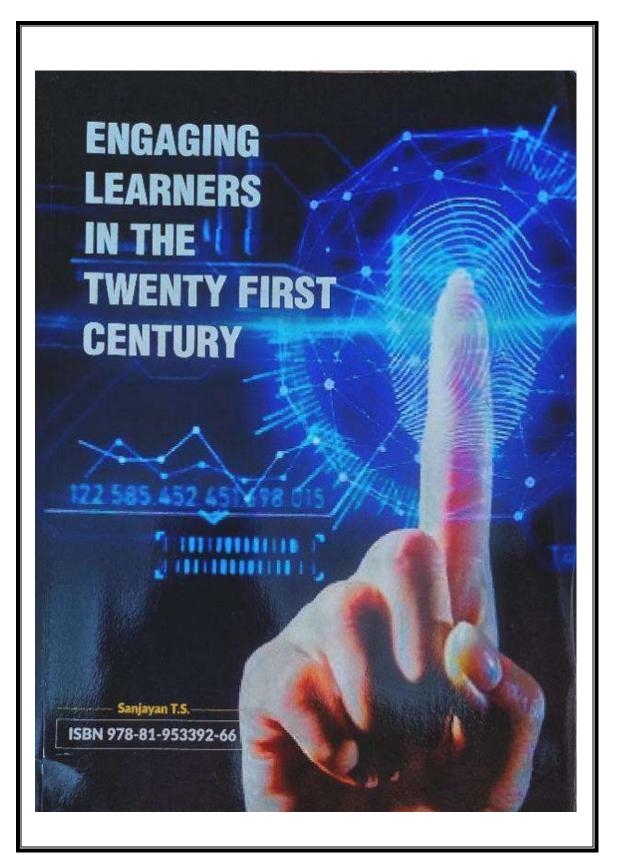
# Sumitha Thomas and Jisha K.C.

Research & Post Graduate Department of Botany, MES Asmabi College, P. Vemballur, Thrissur, Kerala-680671, India.

Abstract- The ideal methodology that can be used for rendering resistance to plants against various stressful situations is priming. In priming, physiological state of seeds can be changed by treating with various priming agents like water, chemical and biological organisms. Various microorganisms including plant growth promoting bacteria and fungi are successfully used for bio-priming in plants. Because of the eco-friendly nature of bio-priming, it becomes an apt method that can be practiced for the future for stress alleviation in crops. It imparts both abiotic and biotic stress tolerance in plants. Agriculture sector has been dramatically depending on the chemical pesticides and fungicides for eradicate pathogenic attacks. Bio-priming is a promising strategy for imparting various biotic/abiotic stresses thus paving way for the removal of chemicals from crop protection.

Introduction - The incipient object of an agricultural sector is the better establishment of crop in a cost-effective method. For many years researches have been investigating to improve the crop production for achieving sufficient food for the future generations (Singh et al. 2016.), Abiotic stress remains the greatest constrain to crop production worldwide. It has been projected that more than 50% of yield reduction is the direct result of abiotic stresses. Biotic stress is another





	Digital Learning: The need of 21st century Learners	69
14.	Digital Learning: The need of 22	
	Dr. Rashmi Singh	
	Dr. Rashmi Singa  Geography Education through HI-Tech tools in the 21st century	72
15.		
	Dr. Chithral ekha K-G	
	Upsurge of Digital Education: Creating an impact in Academic Sector	76
16.	Upsurge of Digital Asset	
	Dr. Reshmi	2000
17.	Inclusive Education in 21st century	79
	100	
	Dr. Nishma Singh & Ms. Saniya Khan	04
18.	Non-Formal Education in Indian context	84
	Ms. Susmita Mondal & Mr. Jugantar Mishra	
		89
19.	Phygital Learning: Engaging Learners with sophisticated Teaching Methods	03
	Mr. Shaikh Javed	
		93
20.	Do L2 Learners motivate to learn via online? A study of SriLankan L2 Learners	23
	Dr. Prasangani K.S.N	
21.	Pursuing the 21st century through strengthening literacy skill	99
	Dr. Ahmad Al Yakin	
22.	Education after Pandemic	103
	Dr. Cap.Somya Sharma	
23.	Rural finances and self help groupos in Rural India	106
	Dr. Yogita Mandole	
24.	The Dale of the Control of the Contr	
	The Role of promoting innovative teaching and learning techniques for person with Disabilities in inclusive Education classroom settings	110
	Fr. Baiju Thomas	
25.	The 21st century Education between Disruption and Eelecticism	
	Dr. Abdual Waft	116
26.	Digital Curation: fostering Educators and Learners in 21st century.	121
	Mrs. Neelufar Farash	121
77	A STATE OF THE STA	
27.	21st century skills through life long learning: Cooperative Learning Skills	126
	Mr. Khushali U. Prabhu	120

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# Upsurge Of Digital Education: Creating An Impact In Academic Sector

# Dr. Reshmi S

Assistant Professor of English, MES Asmabi College, P. Vemballur Kodungallur, Kerala

latroduction:

pigital age is engrossed with the rapid pace of technology development. Education has adopted and adapted genology over the years. The impact of technological intervention in education is a paradigm shift which brings forth a virtual classroom space with the support of Learning Management Systems. Online learning integrates different facets of media like text, graphics, audio, video, animation and simulations. Education must contextualize the need of the age and the gradual shift from classroom- oriented teaching to digitally- oriented platforms enabled technology- based learning.

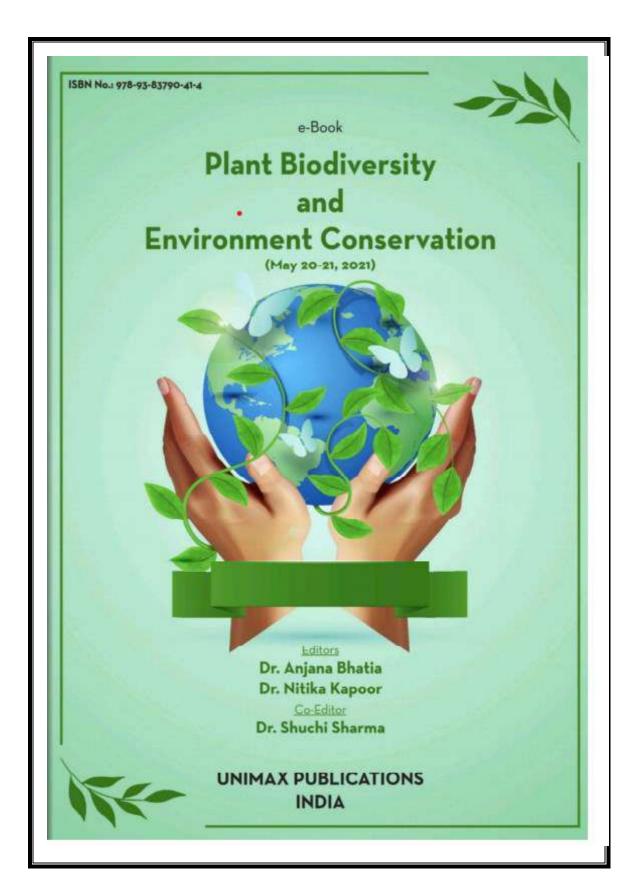
The landscape of digital learning is evolving with a rapid increase in digital education programs around the world. Technology based education prepares students for work force and high-quality education. Despite the potential benefits of digital learning, many students lack access to technologies creating a digital divide. Effective digital learning is channelised through high-speed internet, technological devices, online classes and software for personalized learning. The report from the Asian Development Bank (2009) provides three rationales that support gigial learning: the knowledge economy rationale, which emphasizes education's role in preparing students for the workforce; the pedagogical rationale which prioritizes the optimization of student achievement and educator effectiveness; and the equitable access rationale, which focuses on providing all children with a high-quality

# Integrating Technology in Teaching:

The credibility of new technology and communication platforms integrate online component into educational scenario. This digital panorama is supported by Information Communication Technologies (ICT), cheap telecommunications, the existence of open resources, digital libraries and the spread of access points. Digital education accommodates increasing number of enrolments, new audiences, diversification of student population and promotion of lifelong learning. The globalized access of digital technology increase "either the access to higher education of populations that would be otherwise excluded, or increasing the range of people who might be served by elite institutions" (Larreamendy-Joerns&Leinhardt, 2006, p. 568). Online paradigm also leads to the tansformation of educational environment which is more inclusive and triggers professional development. In the digital era, faculties need to be competent to handle online teaching and employment of adequate technologies,

The miraculous leap of technology is visualized in almost all walks of life whether it be economy, health, science and education. The educational institutions have become instrumental in making huge investments in the field of technology to enhance learning. Powerpoint presentations, multiple projectors and screens, clickers for recording Student responses, 'back-chat' channels on Twitter, enable students to comment on lectures. The transmission of information has been accelerated with the implementation of digital education and it also channelises knowledge avanagement of the students through finding, analysing, evaluating, sharing and applying knowledge under the direction of a skilled subject expert. Digital tools increased the scope of project-based learning, collaborative learning and experiential learning.

Blended learning or hybrid learning ensures technology enhanced learning which allows students to learn online and to improve independent learning skills. This mode of learning demands catalyst for change and is in stark contrast to formal classroom model with students facing the instructor and writing board. The present-day learning environment is guided by three key elements like pedagogy, technology and space. The evolving and diversified teaching methods and learning preferences should be imbibed by the instructors who teach a generation of 'digital-natives'. Vertical surfaces to display content, multiple projection surfaces and whiteboards in various configurations are all important classroom considerations. The constructivist pedagogies in digital State and replaces the role of instructor from that of a sage to a guide. Technologies and new modes of delivery pen up innovative ways and methods in teaching. In the digital age, the instructors communicate with students Tough synchronous communication media- real time collaborative online teaching(voice phone calls, text and



33.	EMS Induced Variations On Quantitative Traits In Linum usitatissimum L. Var. Shekhar.	Choudhary, Neha Naaz , Nazarul Hasan	476-491
34.	Phytochemical Analysis Of Medical Plant Alternanthera sessilis (L)	R. Nivetha ,5 N Ambili, P L Drishya, A Iren Amuth, R Medo Merina	492-500
35.	Phytoplankton Diversity of Katangi Dam, Gondia Dist., Maharashtra.	Prashant C. Shahare, Dhote Bandhu	501-507
36.	HPTLC fingerprinting and screening of antimicrobial activity of <i>Pongamia pinnata</i> pierre.	Rajani Shirsat, Dr.Ajit Kengar, Dr.Aruna Rai	505-523
37.	Use of Vermicompost as an Effective Biocontrol agent	Rakesh Joshi, Bhawana Sohal, Rakesh Kumar, Yadvinder Singh, Rahil Dutta, Deachen Angmo	524-532
38.	Agriculture General Applications: a Study of Digital Imaging Processing	G.Ramachandran , S. kannan	533-542
39.	Economic Fruitfulness of Polyhouse and Open Field Crops in Nashik District	Ramakant.K. Patil	543-547
40.	Diversity Assessment of Grasses in Southern Area of Jabalpur District, Madhya Pradesh	Ramdeen Bhalavi, Shikha Bansal, R.K. Verma, R.P. Mishra	548-557
11.	Perils of Climate Change on Freshwater Ecosystem: Need for Immediate Action	Ria Ghosh, Sandeepa Chowdhury, Puja Ray	558-566
42.	Studies on the Plants Used in the Treatment of Cuts and Wounds from Sindhudurg District of Maharashtra State	S. A. Apate, A. A. Kengar	567-571
43.	Protective Efficacy of Dietary Naringenin Against Cadmium Induced Toxicity	Sakshi Verma , Smriti Batoye	572-583
44.	Floristic Survey on Freshwater Algae from Keladi Pond, Shivamogga District, Karnataka	Savithra Nand, 5 G Malammanavar	584-596
45.	Study of Antibacterial activity of Comellia sinensis against disease causing bacterial strains and its Phytochemical analysis	5 Shalini, M Parvathy	597- 606
46.	Plant Growth Promoting Rhizobacteria (PGPR) and their Mechanisms of Action for Enhancing Crop Productivity	Shanu Khandelval, S.R. Maloo, Ekta Joshi, G.L.Sharma	607-636
47.	Medicinal Orchids Of Shimla Hills, their Uses and Conservation Status	Shaveta Chauhan	637-647
48.	Conservation of Threatened Orchid Species Vanda wightii Rchb.f. in Karnataka	Shreyas Betageri , Prashant Karadakatti	648-655
49.	Metabolism of Indole Acetic Acid within the Root Nodules and Changes of Edaphic Factors in the Rhizospheric Area of Vigna Radiata	Sisir Ghosh	656-664
50.	Leaf Based Phenetic Analysis on the Selected Taxa from the Genus Ficus L (Moraceae) from Southern Western Ghats	5 Nair Sreehari, K H Amitha Bachan , P J Ebin	665-672
51.	Diversity and Seasonal Fluctuation of Phytoplankton in a Fresh Water Lentic Water	Sudhrita Pore, Subhabrata Ghosh, Jai Prakash Keshri	673-679

# Leaf Based Phenetic Analysis On The Selected Taxa From The Genus Ficus L (Moraceae) From Southern Western Ghats

<sup>19</sup>Sreehari S Nair, <sup>2</sup>Amitha Bachan K H and <sup>3</sup>Ebin P J

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### ABSTRACT

The present work is a leaf based phenetic study on the selected members of the genus Ficus from Southern Western Ghats. Sixteen morphological characters of the leaf considering 102-character states were studied. The species were collected and careful morphological observations were made. The morphological characters were standardised into numerical format with the presence or absence of each character state represented with 1 and 0 respectively. The data was analysed using PAST Ver 2 Software and a dendrogram was obtained. The species were alligned based on the similarities on leaf morphology. The dendrogram obtained showed that the leaf morphology-based clustering is not exactly similar to the current accepted sub generic classification of Ficus. But the clustering was almost similar to a habit-based classification of Ficus into plants with cauliflorous inflorescence, stranglers, epiphytic & hemi epiphytic trees and independent trees. Thus, it implies that the leaf morphology-based clustering in Ficus is similar to its habit pattern.

Key words: Ficus, Leaf morphology, Phenetic study.

### INTRODUCTION

The genus Ficus L. (Moraceae) is one among the most abundant, complex and diverse angiosperms. The hypanthodium inflorescence, minute flowers and morphological complexity make the genera problematic. They are commonly called as 'Fig' plants. About 750 species of Ficus is distributed in the world, chiefly in the tropics and sub tropics (Corner, 1965; Berg & Corner, 2005). India has a diversity of 115 taxa of Ficus, majority of them distributed in the North Eastern regions (Chaudhary et al., 2012). Around 40 species of Ficus have been reported from the Western Ghats region. According to the current classification, the genus is divided into six subgenera based on overall morphological and sexual features (Berg, 2003).

# साहित्यिक संवाद

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पुस्तक के किसी भी अंश के प्रकाशन, फीटोकॉपी, इलेक्ट्रॉनिक माध्यमों में उपयोग के लिए लेखक च प्रकाशक की लिखित अनुमति आवश्यक है। पुस्तक में प्रकाशित आलेख/आलेखों के सर्वाधिकार मूल रचनाकार/रचनाकारों के पास सुरक्षित है। पुस्तक में न्यक्त विचार पूर्णतया लेखक/लेखकों अथवा सम्पादक/सम्पादकों के हैं। यह जरूरी नहीं है कि प्रकाशक इन विचारों से पूर्ण या आंशिक रूप से सहमति रखे। किसी भी विवाद के लिए न्यायालय दिल्ली ही मान्य होगा।

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प्रकाशक

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A Festschrift in Honour of Prof. K. Vanaja edited by Prof. N. Mohanan,
Prof. Saji R. Kurup & Prof. Shyamkumar S.

# पोस्ट बॉक्स नं. 203 नाला सोपारा में ट्रांसजेण्डर विमर्श संजीव कुमार के.

"डर, हिकारत, अछूता हीन, उपेक्षित.... देखकर हमें कुछ यूँ, है जहाँ सारा, नजरें फेर लेता.... क्या खूब सूझी, तुझे भी ऐ खुदा, इक कहर है तेरा यह भी, 'अधूरी देह' देना.... -गीतिका वेदिका की कृति 'अधूरी देह' से

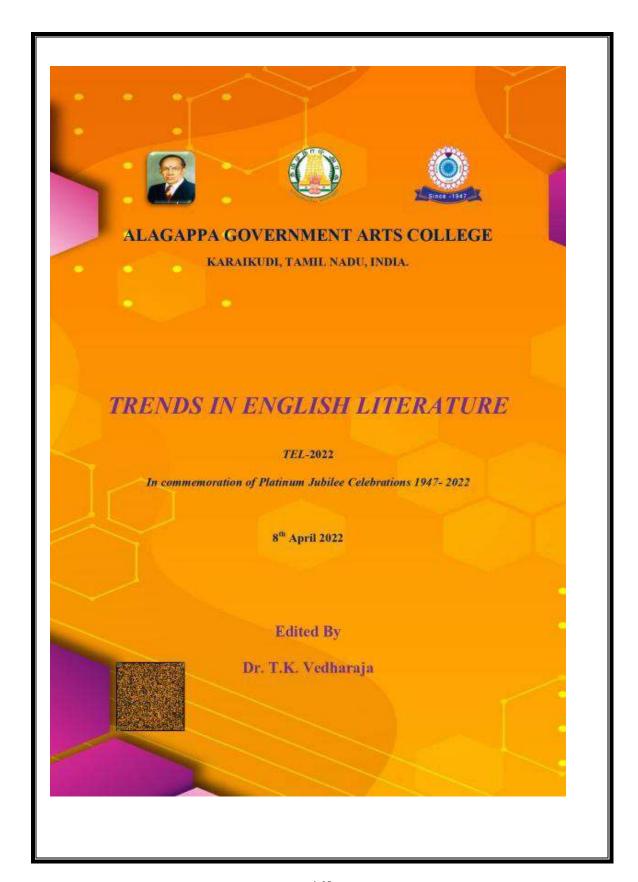
इक्कीसवीं सदी विमर्शों की सदी है। चाहे वह नारी विमर्श हो, दलित विमर्श हो, या आदिवासी विमर्श हो। इन विमर्शों के समान्तर एक नया विमर्श अपनी उपस्थिति दर्जा कर रहा है— वह है जेण्डर विमर्श। विश्व में दो लिंग के अलावा एक अन्य प्रजाति के लोग रहते हैं, जो न ही पुरुष के श्रेणी में आते हैं और न ही स्त्री श्रेणी के अन्तर्गत। जिन्हें हम हिजड़ा, जेण्डर, नपुम्सक, खोजा आदि उपनामों से सम्बोधित करते हैं।

चित्रा मुद्दगल व्दारा लिखित 'पोस्ट बॉक्स नं.203 नाला सोपारा' (2016) उपन्यास में एक तृतीय लिंगी बालक की वेदना और संवेदना को बताया गया है। यह उपन्यास पत्रकारिता शैली में लिखा गया है। पूरा उपन्यास माँ-बेटे के बीच के संवाद पत्र के माध्यम से है। बिनोद उर्फ बिन्नी उर्फ बिमली जन्म से नपुसंकलिगं है, उनके घरवाले समाज के भय के कारण उसे हिजड़ों के हाथ में सौंप देता है। माँ घरवालों से छपकर पोस्ट बॉक्स व्दारा आये पत्र के माध्यम से अपने बच्चे के साथ बात करती है। बिन्नी कई शिकायत अपनी माँ से करती है।– "तूने, मेरी वा, तूने और पप्पा ने मिलकर मुझे कसाइयों के हाथ मासूम बकरी सा सौंप दिया। मेरी सुरक्षा के लिए कोई कानूनी कार्रवाई क्यों नहीं की? मनसुख भाई जैसे पुलिस अधीक्षक पप्पा के गहरे दोस्त के रहते हुए? वो अपने आप मुझे बचाने के लिए तो आ नहीं सकते थे। मेरे आंगिक दोष की बात पप्पा ने उनसे बाँटी जो नहीं होगी। वरना वह मुझे बचाना जरुर आ जाते"। विनोद के मन में दुनिया को लेकर ही नहीं बल्कि खुद के बारे में भी बहुत अधिक सवाल है। वह अपने माँ से पूछता है- "मंजुल के गोद में सम्भालते हुए मैंने तुझसे प्रश्न किया था, 'मेरे नुल्नू क्यों नहीं है, बा?' तो तूने मुझे बहलाया था। 'बच्चे के जन्मते ही आटे का मुल्नू बनाकर लगान पड़ता है। नर्स भूल गयी तुझे लगाना। लगवा देंगे तुझे भी"। विनोद की ओर से लिखी चिट्टियों के माध्यम से हिजड़े जीवन की अनगिनत त्रासदियों को प्रस्तुत कर गम्भीर संवेदनशीलता की परिचय देती है चित्रा जी।

बिन्नी के माँ-बाप ने उसे कई डॉक्टरों को दिखाया था। लेकिन किसीसे कोई लाभ नहीं

12 / स्थानिका संवाद	- स्वादाण्याना जी. के.	520
का कहानियां - अस्त्राम्	- साधाना भी.	534
उद्यापकार्य कर्त 'शकुरातक)' का स्वाप्तिक आस्त्रीलाम भागवान्या संस्थान कर्त 'शकुरातक) का स्वाप्तिकार्या आस्त्रीलाम समकातीन हिन्दी उपन्यास में अभिज्यान आदिवासी आस्त्रीलाम	— इसाहियक्डी फी.एस	537
	-6444 41,41	543
selfic street with the Land	<b>一世刊</b>	548
वर्ती कर राजनीतिकः अस्ति।	- mm +m	556
सम्बन्धानी स्त्री केन्द्रित हिन्दी उपायाओं । 'में प्रायाल' उपायास में किन्सर समाज के बास्तविक मीवन		
न्द्र वासल, उत्तवाल भ । क	— पी. के. धाराभा	559
कत (अवधा द्यालन कविता - अध्यतकोचना के: प्रति भाववीचना का विद्रोह	- राजीन्द्रन पटिज्ञारे कारम्भला	
	को सम्बद्धाः भी सम्बद्धाः	563
स्वकालीय दिन्दी कविता में भूमें इलीकरण		500
	- U. Sr. 1873	572
- कार्याची के प्रतिकार के निर्माण के विकास कार्याची कार्	- 37F7F17 *#1,1251.	The same of the sa
अशीला हाकभीरे की कांवताओं के विशेष संन्यत न	- लिन्द एम.जी	578
-समर"- गारी के संघर्षभय जीवन का दूसरा नाम	- रानी आर कुरूप	582
विवासन बनाम आत्मानसस	— सना आर कुरूप — मनोज एन.	587
याँच औरानीवाला घर-उपत्यास में चित्रित राजनीतिक संथार्थ		593
जब कविता मापक भन्त्र वनता है	— स्थितास्त्रस्थार छ. ३गर.	596
वी. टी. की कहानियों में चित्रित स्त्री-जीवन	—दापक के, आर.	600
केरल का पंचित नवजागरण । सलयाल्म उपन्यास		
'धातकवधम' के विशेष सन्दर्भ में	-राजान ही. के.	606
लेखक की मृत्यु और उत्तर-आधुनिक आलोचना की अवधारणा	-सीमा चन्द्रन	612
संपर्व भरी दास्तान का दस्तावेशः 'ए जिन्दगी तुझे सलाम'	- गरली. के. प्रनूस	617
"जब आप" कविता और कवित का खुलाखा	— प्रतीप की भी	623
यामकालीन आविवासी कविता और अस्तित्व ब्रोध	—लेना पा जे	625
किन्दी बढ़ानियों में आम आदमी	- जोगिस सेम	630
आदिवासी कविता में धार्तरस्विवर बोध	- यथामक्षमार एस	650
पोटट बोक्स ने. 203 नाला सीधारा में ट्रांसजेपहर निमर्श	- elatter aprile. de	656
दिलत चेतना और दिलत नारी	— सामा जे.	659
समकालीन हिन्दी कविता में टान्सजेण्डर	- सीना कारियन	663
हिल्ही एवं अंग्रेजी के विभाजन साहित्य में स्त्री	— अवसी एल्प्स जेकस	669
एक बकानी यह भी में अभिव्यक्त मारी जीवन		
The state of the s	- तेरेसा हिनसी ही. जी	

A Disease of Parties		
12 / स्माहित्यक संवाय उदयप्रकाश की कहानियाँ – उत्तराधुनिक सन्दर्भ में उदयप्रकाश की कहानियाँ – उत्तराधुनिक सन्दर्भ में	- सुब्रह्मण्यन वी. के.	529
12 / स्वातः उदयप्रकाश की कहानियाँ - उत्तराधुनिक सन्दर्भ में उदयप्रकाश की कहानियाँ - उत्तराधुनिक सन्दर्भ में धगवानदास मोरवाल कृत 'शकुंतिका' का समीक्षात्मक अध्ययन धगवानदास मोरवाल कृत 'शकुंतिका' का समीक्षात्मक आदिवासी आन्दोलन	–साधका पा.	534
अत्यप्रकाश वर्षः भगवानदास मोरवाल कृत 'शकुंतिका' का सनावार भगवानदास मोरवाल कृत 'शकुंतिका' का सनावार समकालीन हिन्दी उपन्यास में अभिन्यक्त आदिवासी आन्दोलन समकालीन हिन्दी उपन्यास में	-इब्राहिमकुट्टी पी.एच	537
A COUNTY OF THE PROPERTY OF TH	–हरमन पा.ज	543
आदिवासी जीवन का गूजात जा	-हेना	548
रवी का राजनैतिक पहल	– बीना पैली	556
रबी का राजनैतिक पहल समकालीन स्त्री केन्द्रित हिन्दी उपन्यासों में घरेलू हिंसा समकालीन स्त्री केन्द्रित हिन्दी उपन्यासों में घरेलू हिंसा 'मैं पायल' उपन्यास में किन्तर समाज के वास्तविक जीवन	Va. 4. 100	
'मै पायल' उपन्यास म किलार र "		559
का चित्रण दलित कविता—अमानवीयता के प्रति मानवीयता का विद्रोह	– राजेन्द्रन पटिञ्जारे	
दलित कविता-अमानवायस र गा		563
समकालीन हिन्दी कविता में भूमंडलीकरण	– जे. वासन्ती	566
, — कर्म कारों के सहस्रात्री	-ए. के. बिन्दु	572
० न निज्याओं में प्रतिध्वनित दोलत नारा प्रियान	THE REPORT OF THE PARTY OF THE	
सुशीला डाकभीरे की कविताओं के विशेष सन्दर्भ में	– अनिता पी.एल.	578
"समर"- नारी के संघर्षमय जीवन का दूसरा नाम	-बिन्दु एम.जी	582
निर्वासन बनाम आत्मनिरास	–सजी आर कुरुप	587
पाँच आँगनोवाला घर-उपन्यास में चित्रित राजनैतिक यथार्थ	–मनोज एन.	593
जब कविता मापक यन्त्र बनता है	–विजयकुमार ए. आर.	596
वी. टी. की कहानियों में चित्रित स्त्री-जीवन	–दीपक के. आर.	600
केरल का दलित नवजागरण : मलयालम उपन्यास		
'धातकवधम' के विशेष सन्दर्भ में	– राजन टी. के.	606
लेखक की मृत्यु और उत्तर-आधुनिक आलोचना की अवधारणा	–सीमा चन्द्रन	612
संबर्ष भरी दास्तान का दस्तावेजः 'ए जिन्दगी तुझे सलाम'	– मेरली. के. पुन्नूस	617
"जब आप" कविता और कवित का खुलासा	-प्रदीप सी. पी	
समकालीन आदिवासी कविता और अस्तित्व बोध		623
हिन्दी कहानियों में आम आदमी	- लैजा पी जे	625
	– जोयिस टोम	630
अदिवासी कविता में पारिस्थितिक बोध	–श्यामकुमार एस	650
पोस्ट बॉक्स नं. 203 नाला सोपारा में ट्रांसजेण्डर विमर्श	– संजीव कुमार. के	656
दलित चेतना और दलित नारी	– वीणा.जे.	659
समकालीन हिन्दी कविता में ट्रान्सजेण्डर	– सीना कुरियन	663
हिन्दी एवं अँग्रेजी के विभाजन साहित्य में रून	The second second	669
एक कहानी यह भी में अभिवयक्त नारी जीवन	- रूबी एल्सा जैकब	
मा आवन	- तेरेसा टिनसी टी. जी	684



## About the Conference

Alagappa Government Arts College celebrates 75th anniversary. In this platinum Jubilee year, in memory of the founder of the college, Alagappa Chettiyar, who is a voracious reader himself, it is decided to conduct a National level conference on a title that could bring in various areas of knowledge. Hence, the title Trends in English Literature became the title of the conference in commemoration of the Platinum Jubilee Celebration (1947-2022) of the college. The purpose of this conference is to decipher modern developments in English literature to trace the antecedents and the present state of literature to refresh about the recent literary themes, theories and approaches.

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Indexing Details: Google Scholar, Internet Archive

25	Study of Ecological Milieu in the Select Novels of Jonathan	109
	Franzen	
	S. Murugesan	
26	A Study on Aravind Adiga's "The White Tiger"	111
	M.Niranjana & M.Robina	
27	Hegemony in "Vanara"	113
	Mrs. V. Packialakshmi & Dr. G. Somasundaram	
28	Study of Myth and History in the Ashwin Sanghi's	117
	Novel Chanakya's Chant	
	Parkavi & Dr. P. Madhan	
29	Six Word Novels: Their Evolution and Exploitation in Language	120
	Teaching	
	Dr. S. Parvathavarthini	
30	A Postcolonial Analysis of J.M. Coetzee's Life and Times of	125
	Michael K	
	A. Pavithra	
31	Cultural Impact in Kiran Desai's 'The Inheritance of Loss'	129
	Ms. S. Pramma Lakshmi	
32	Reader Response Theory: A Critical Study	131
	Dr. R. Rajan Ganapathhy	
33	Portrayal of Injustices in Aravind Adiga's The White Tiger	134
	G. Rajkumar	
34	Feminist Perspective in the Novel Fasting, Feasting by Anita	138
	Desai	
	K. Ramnath	
35	Ecofeminist Images in Jayakanthan's Sila Nerangalil Sila	143
	Manithargal and Anita Nair's Ladies Coupe	
	Dr. R. Ravindran & Dr. T. K.Vedharaja	
36	Flash Fictions: Creative and Innovative Trends in New	148
	Literature	
	Sabitha	
37	Postcolonial Aspects in Indian Women Novelist	152
	M. Saranya	
	Carried State Company of the Company	

### Flash Fictions: Creative and Innovative Trends in New Literature

Sabitha M.M., Assistant Professor, PG Dept of English, Mes Asmate College, P. Vembalhar, Kodungaillar, Thriswar-680671

### Abstract

In this modern world as people are busy with their day to day work-life endeavours, it will be quite difficult for them to find time to sit and read a lengthy novel or novella within a stipulated time limit. They may discard their reading habit in their hazardous work schedule, Modern citizens would like everything to be handy and portable and use every bit of time in their own comfortable way. This might be the reason that these tech sowy beings, especially those who don't want to give up their reading habit, prefer short fictions or micro fictions rather than lengthy novels or books. They can read these short fictions within a short period of time and can enjoy every nuances of storytelling. Flash fictions were in vogue in the early 19th century, but they came to be prominent recently in the 21th century due to the advancement and development of social media culture. This paper intends to elucidate the innovation and expansion of the genres of flash fictions and micro fictions and to analyse the narrative techniques by exploring some of the popular flash fictions.

Keywords: FlashFiction, Microfiction, Sixword fiction, Characteristics, Narrative techniques.

### Introduction

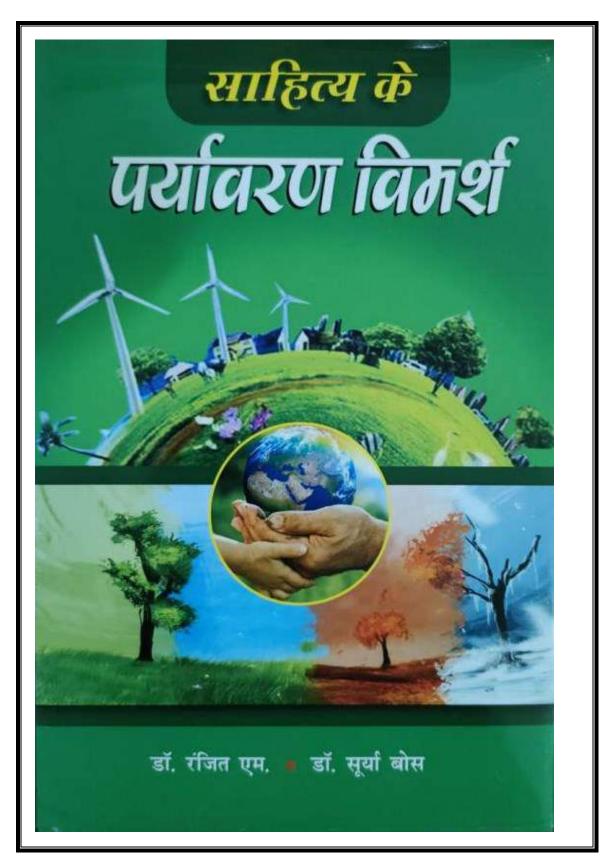
Flash fiction is a type of prose narrative, which takes itself the form of a brief, self-contained story. Its word count ranges from 5 to 1000 words on average and can go up to the maximum of 1500 words. It's also known as short shorts, nano-tale or micro story, and the form of the story is unique as it focuses on movement rather than focusing on plot or character development. Each sentence or each word peels back a layer and progresses the story. Look at these six words: For sale: baby shoes, never worn. This is a premier example of the fiction's shortest form. In flash fiction, where twist endings and enigmatic last lines are standard practice, just six words can allude to the tragic death of a child. This six words fiction can be attributed to Earnest Hemingway. He was a prolific practitioner of the form. Lets look at an example of his work to see what makes short shorts so engaging

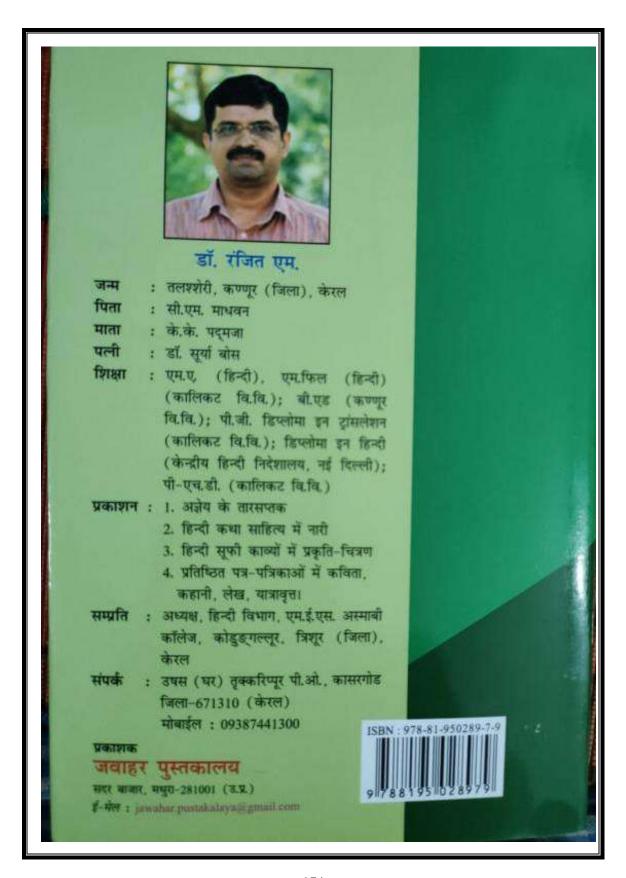
They shot the six cabinet ministers at half past six in the morning against the wall of a hospital. There were pools of water in the courtyard. There were wet dead leaves on the paving of the courtyard. It rained hard. All the shutters of the hospital were nailed shut. One of the ministers was sick with typhoid. Two soldiers carried him downstains and out into the rain. They tried to hold him up against the wall but he sat down in a puddle of water. The other five stood very quietly against the wall. Finally the officer told the soldiers it was no good trying to make him stand up. When they fired the first volley he was sitting down in the water with his head on his knees.

"Chapter V", a vignette from Hemingway's collection In Our Time. follows the form of great flash fiction. With a straightforward beginning and violent clasp that summarizes the

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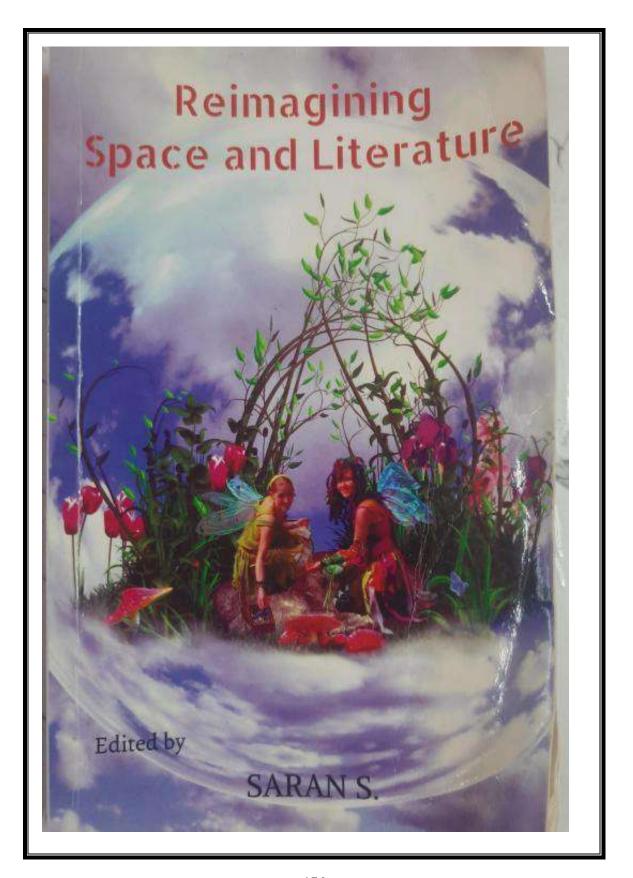
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- 3. "Electronic Literature: A Review of the Heterotopic Space in Posthuman Reading"- \*Darsana A., Asst. Prof. Don Bosco College, Kottiyam. \*\* Wilson K. D., Research Scholar, Christ University, Bangalore.
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- S. "Discontinuity in Sentence Construction While Writing English Among High School Students"- "Swarna Anna

# CHAPTER IV

# WHAT IS WRONG WITH OUR UPBRINGING? OBJECTIFYING WOMEN IN INDIAN CINEMA AND ITS IMPACT ON MARRIED LIFE: A SELF STUDY

# Najma Nazeer

Assistant Professor

Department of Mass Communication

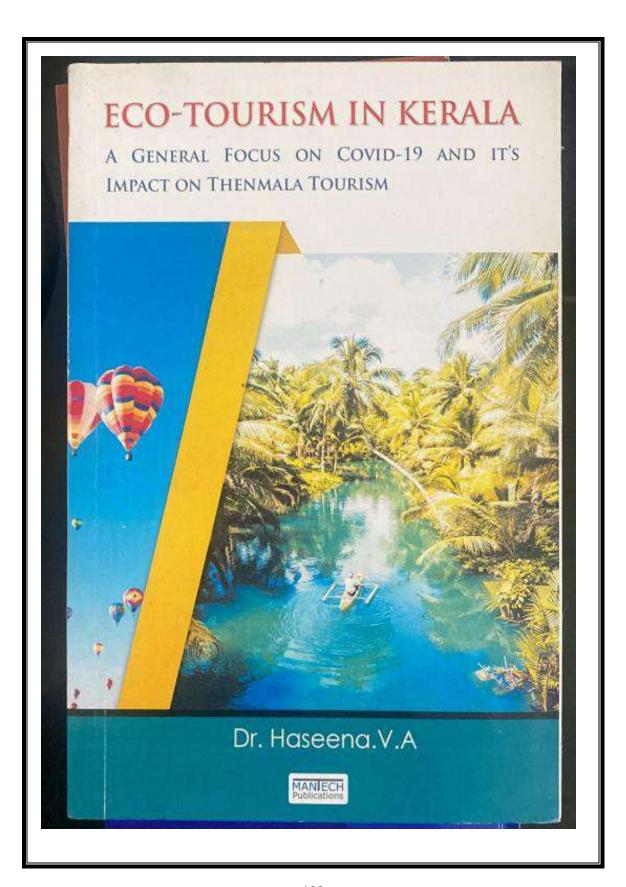
MES Asmabi College, Thrissur, Kerala.

# Abstract

Traditionally, social norms have prescribed certain genders for men and women. Men are generally considered to be dominant, masculine, and independent, while women are portrayed as weak, sensitive, and dependent. In contemporary society, women are free to adopt more active sex, from what is considered "masculine," to what is considered more "androgynous," to the more stereotypical female roles. Some women, however, continue to adopt traditional gender roles where self-objectivity exists. This paper will analyze major things wrong with our upbringing and the influences of Indian cinema on objectifying women in married life.

Keywords: Objectification, feminism, marriage, and self-love.

The book 'Reimagining Space and Literature' seeks to provide an overview of the key theoretical approaches to spatial studies, as well as their most important inquiries and methodological implications. Our fundamental goal is to present a comprehensive analysis that includes classical geo-critical perspectives as well as contemporary transnational, quantitative, or digital studies that have impacted our understanding of space and its literary functions. This colloquium aims to bring together the fields of classical (Greco-Roman) and modern literature by focusing on space in literary works. We hope that this meeting will cross-fertilize (the study of space in) both domains by sparking discussion on similarities, continuities, and differences in the function of literary space. To this end, we focus in particular on four themes like Surveillance studies, Environmental Post-Humanism. cartoons, and graphic studies. When speaking of space in narratology and other fields, a distinction should be made between literal and metaphorical uses of the concept. As an a-priori form of intuition, space is particularly difficult to capture in its literal sense. Edited by Saran S. **Edit Academic** July 2021 Price Rs 700.00 ISBN 978-1-63974-569-2



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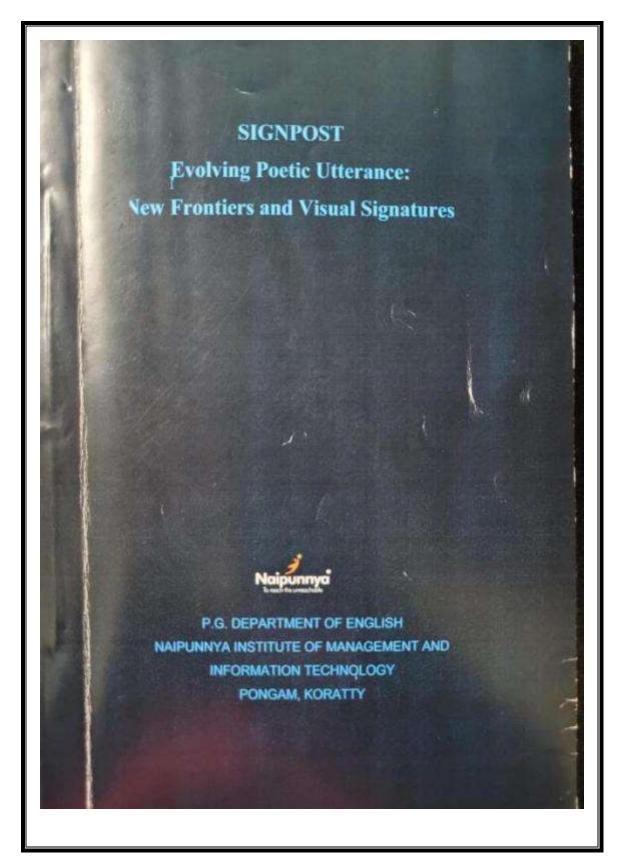
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### Presenting Man and Nature in the Light of Ecocriticism in the Malayalam movie, Melepparambil Ann Veedu

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Department of English,
M. E. S. Asmabi College,
P. Vemballur, Kodungallur.

#### Abstract

Man's life is intensely entwined with Nature. An existence without it is just a matter of nonexistence. His dependence on Nature can be traced from the very beginning of humanity itself as presented in Vedax, Puranas, Upanishadi, Epics and classical literatures. Nature is indispensable part of human life.

Man's life is essentially one with his ecosystem. Parting his soul from it is really hard. This interdependence and connection is successfully presented on screen in the Mulayalam movie. "Meleparambil Ann Veedu." (1993), directed by Rajasenan. The locale is a lush green rural area in the District of Palaghat in Kerala. All the male members of the family are farmers except the educated younger one. The rich paskly fields, untarred roads, thatched or tiled roof homes, the village ponds all these idyllic scenes are relived on the silver screen through the film. My paper attempts to examine the interconnection between Man and Nature and to create an awareness about the importance of preservance of Nature in an era of Global warning and the consequent natural calamities.

Key Words: Ecocriticism, Pastoral, Taoism, Locus amoenus.

### Introduction

"Simply defined ecocriticism is the study of relationship between literature and physical environment". Cheryll Giotfelty. (Barry 248)

Ecocriticism is the study of literature and environment from an interdisciplinary point of view, where literature scholars analyse texts that illustrate environmental concerns and examine various ways literature treats the subject of Nature.

Signpost | 1

## Contents Pages Presenting Man and Nature in the Light of Ecocriticism in the Malayalam movie. Molepparambil Ame Veedu A Disquisition on the Relevance of English Poems in Overcoming Stress: A Quantitative Study Conducted Among Youngsters Aby John and Johns Shaju Rhetorical and Visual Representation of Girish Karnad's Horanualmus 11 Dr. Purnima S Komar Quest of Identity and Alienation in Omprakash Valmiki's Joothum: A Dalit's Life 19 Stepping into the Well: A Shinto Revival through the Anime. Inu Yasha Greeshma Joseph and Greena Joseph

Shiji Brishim U.

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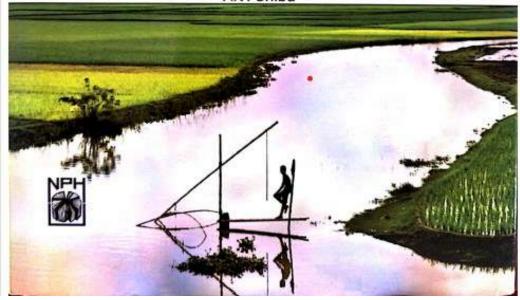
Mapping Politics and Power Sexual Morality and the Ann-Hero 39 Elza Maria Baby.

Sense of Loss, Homelesaness, Inolation in Diasporie Writers Aglar Shahid Ali and Mahmoud Darwiwsh 48. Jomot P. John and Dona Kunjumon



## IMPACT OF CLIMATE CHANGE ON HYDROLOGICAL CYCLE, ECOSYSTEM, FISHERIES AND FOOD SECURITY

B. Madhusoodana Kurup M.R. Boopendranath M. Harikrishnan A.V. Shibu



Impact of Climate Change on Hydrological Cycle, Ecosystem, Fisheries and Food Security,

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vill	Amen Mussel in Ashtamudi Lake, a Ramsar Site in	
30.	Widespread Invasion of an Allen Mussel in Ashtamudi Lake, a Ramsar Site in Kerala, India  P.R. Dhya, T.T. Ajith Kumar, Kuldeep Kumar Lal	359
31	Assessing the Drivers of Forest Degradation in Peechi-vaztani Wildlife Sanctuary. Western Ghats Shalu George, Manjusha, K., Mukesh Lal Das, Nadirsha PS Nawab, S. Anhazhagi and Muthukumar Muthuchamy	365
32.	Structural Analysis of Major Mangrove Forests of India S. Sreelekshmi, S. Bijoy Nandan and M. Harikrishnan	379
200	FOOD AND NUTRITIONAL INSECURITY	391-508
33.	FOOD AND NOT RETIDENT TO SECURITY IN THE Perspective of Climate Change K. Gopakumar	393
34. 8	Export Oriented Aquaculture for Seafood Exports from India	399
	K.S. Srinivas	
	A Meta-Analysis Study on Types of Seafood Mislabelling in Canada Lovena Mathew	407
se	State of Biocultural Diversity, Climate Change and Ethnic Meat and Fish Products of Northeast India: A Review	425
F	Ranendra Kumar Majumdar	
1	Utilization of Secondary Raw Materials from Fish for Developing High Value Novel Foods and Dietary Supplements	439
5	Suseela Mathew and C.N. Ravishankar	
	Characterization of Collagen from the Skins of Three Different Commercial Important Fishery Resources	ly 45
	floe Theingi Hlaing, K. Elavarasan, U. Parvathy, C.G. Joshy and George Ninan	
9. C	Consumer Preference for Value added Fish Products in Kochi (Kerala)	46
	Mary Saniya Stephen and Dhanya Pulikkottil Rajan	
0. C	Chemical and Biophysical Properties of Gelatin Composites from Cephalopods for the Improvement of Textural Quality in Sausages	4
F	Roopa Rajan, L. Aranganathan and S.R. Radhika Rajasree	

of Climate Change on Hydrological Cycle, Ecosystem, Fisheries and Fond Security, Pages: 469-426, p. Masflusoodana Kurup, M.R. Boopendranath, M. Harikrishnan and A.V. Shanger, 2021, Narendra Publishing House, Delhi, India

### C H A P T E R - 39

## Consumer Preference for Value added Fish Products in Kochi (Kerala)

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Fisheries sector has witnessed an impressive growth from a subsistence traditional activity to a well-developed commercial and diversified enterprise. It has been playing a pivotal role in the economic development by virtue of its potential contribution to employment generation, income augmentation, addressing food and nutritional security concerns and foreign exchange earnings. World fish production has increased immensely and the capture fishery has arrived at a state of over exploitation. An alarming increase in human population is resulting in widening the supply-demand gap, with the consequences of reduced availability, rising price and search for alternative resources to meet the gap (Clark, 1990).

Low priced fishes are either converted to fish meal or sold for curing. In general, deep-sea fishes may not be immediately acceptable to the consumers due to unfamiliarity in shape, size and colour of the new varieties. These low priced fishes are nutritionally and chemically in no way inferior to that of fishes of commercial importance. Therefore, collecting and processing meat of these fishes into diversified value-added products suiting to human consumption would result in effective utilization of the resource. Moreover, purchasing capacity of people is going to enhance in years to come and market prices are going to be high for fish (Salim, 2008).

Marketing of value-added fish products is completely different from traditional seafood trade. Market surveys, packaging and advertising are a few of the very important areas, which ultimately determine successful movement of new products. Most market channels currently used may not be suitable to trade value added fish products. A new appropriate



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### CONTENTS

Syzygium travancoricum Gamble, an endangered endemic species of
Southern Western Ghats
Smitha PS and Anto PV
Diversity of the genus Nostoc (Cyanobacterium) from the forests of
Palakkad District, Kerala
Manu Philip, Navya Patrick and VV Radhakrishnan
The Genus Oryza and its cultivated species
Surekha Y Pawar
Addressing the Limitations of Niche Modelling for Species Distribution
Prediction with Reference to the Western Ghats
Devika M Anilkumar and KH Amitha Bachan
Taxonomy and Diversity of the Lesser-Known Varieties of Ficus virens
(Moraceae) from the Western Ghats
Sreehari S Nair and KH Amitha Bachan
Taxonomy and distribution of genus Hydanocarpus gaertn. (Flacourtiaceae) in
Kerala
Jithin KV, Anto PV and Ignatius Antony
Phytoplankton assessment of Heart Lake, Western Ghats, Kerala72
Dhanya Jose, Anto PV and Ignatius Antony
Taxonomy and Distribution of Euglenoids in Kalpathy river, Palakkad78
Seena KK, Anto PV and Ignatius Antony
Floral biology and phenology of Impatiens violacea (Balsaminaceae),
an endemic balsam of Western Ghats
Reshma Ashok, Anto PV and Ignatius Antony

## Taxonomy and Diversity of the Lesser-Known Varieties of Ficus virens (Moraceae) from The Western Ghats

Sreehari S. Nair<sup>1</sup> and K.H. Amitha Bachan<sup>2</sup>

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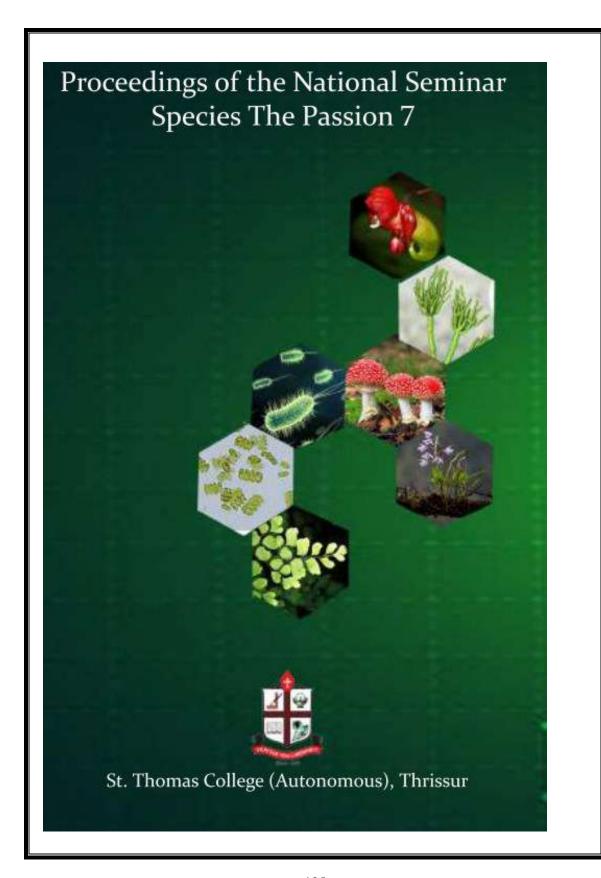
### Abstract

The genus Ficus (Moraceae) which comprises around 115 taxa distributed in India is a dominant genus among the angiosperms. A comprehensive revision of the genus Ficus L., from the Western Ghats, recorded 36 taxa of Ficus. Encountered two interesting specimens were identified as varieties of Ficus virens. Ficus virens Aiton is one of the most common and widely distributed species of Ficus in the world. Which shows great complexity in the morphological characters and hence more complex in the taxa. Whereas the Ficus virens var matthewii, is a new record for Kerala and Ficus virens var dispersa, a new report to India. These two varieties of Ficus virens showed significant differences from the common variety Ficus virens var virens. A detailed taxonomic description of all the three varieties along with an identification key and images are provided here.

Keywords: Distributional record, Ficus virens, Urostigma, Western Ghats.

### Introduction

The genus Ficus L., (Moraceae) is a highly diversified genera with respect to the habit pattern and life forms. The genus is mainly distributed in the tropical and subtropical regions of the world (Chaudhary et al., 2012; Mohapatra et al., 2020). The presence of the specialised inflorescence - hypanthodium, minute flowers and morphological complexities make the genera problematic. The global revision of the genus by E. J. H. Corner since 1930, reduced the number of species to ca. 750. The first detailed work on the genus from India was carried out by G. King (1887) and recorded 113 species and 47 infraspecific taxa of Ficus. The genus remained unnoticed except few regional works. BSI initiated a revisionary work on the genera and reported 115



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Manu Philip, Navya Patrick and VV Radhakrishnan
The Genus Oryza and its cultivated species
Surekha Y Pawar
Addressing the Limitations of Niche Modelling for Species Distribution
Prediction with Reference to the Western Ghats
Devika M Anilkumar and KH Amitha Bachan
Taxonomy and Diversity of the Lesser-Known Varieties of Ficus virens
(Moraceae) from the Western Ghats56
Sreehari S Nair and KH Amitha Bachan
Taxonomy and distribution of genus Hydanocarpus gaertn. (Flacourtiaceae) in
Kerala
Jithin KV, Anto PV and Ignatius Antony
Phytoplankton assessment of Heart Lake, Western Ghats, Kerala72
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an endemic balsam of Western Ghats
Reshma Ashok, Anto PV and Ignatius Antony

## Addressing the Limitations of Niche Modelling for Species Distribution Prediction with Reference to the Western Ghats

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### Abstract

Ecological Niche modelling has a prime importance in prediction of niche suitability of a species. The study addresses the limitations of Species Distribution Modelling (SDM) using a modified methodology (MSDM) and experimented here with four threatened species of the Western Ghats. The authentic distribution records and bioclimatic variable gives an accurate Maxent-based prediction to the potential habitat of the species. SDM is facing a greater challenge hence it not considering the factors of the Eltonian niche. The incorporation of species associates, altitude and terrain features helps to consider the factors of the Eltonian niche which probably lack in the Species Distribution Modelling (SDM). The study with the support of detailed works affirms here the MSDM is more efficient and suitable for prediction of potential locations for species in the Western Ghats compared to the normal SDM. The coalescence of habitat degradation factors based on vegetation and land use spatial information imparts more precision into the suitability of projected areas. Here, we tested this with the habitat prediction of four threatened species Cryptocarya anamalayana Gamble, Diospyros crumenata Thwaites, Prioria pinnata (Roxb. ex DC.) Breteler, Orophea erythrocarpa Bedd, which occupies a unique and narrow niche in the forest of the Western Ghats. This approach can be used for the prediction of potential habitat of threatened species for conservation and ecorestoration.

# Cultural Congruence: Contemporaneity and Confluence

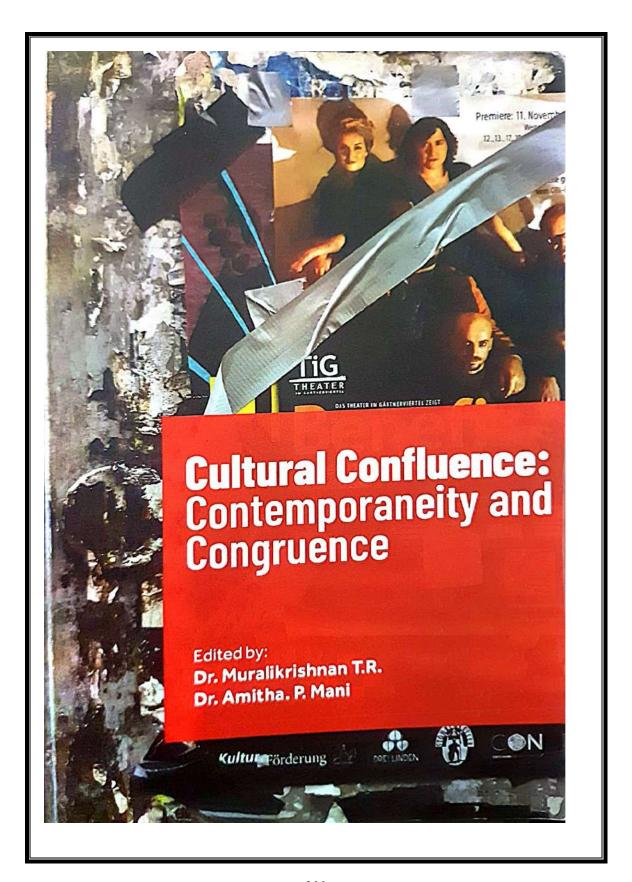
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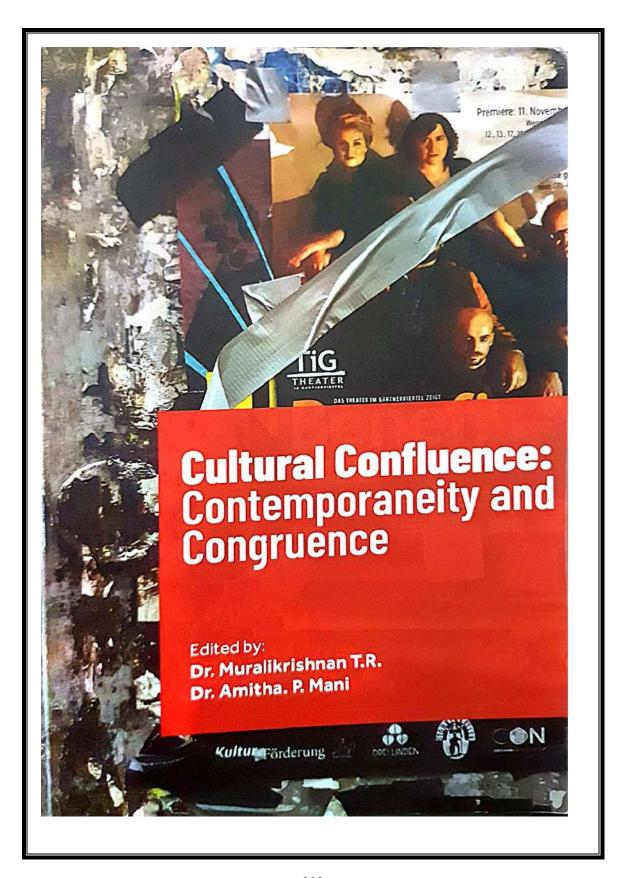
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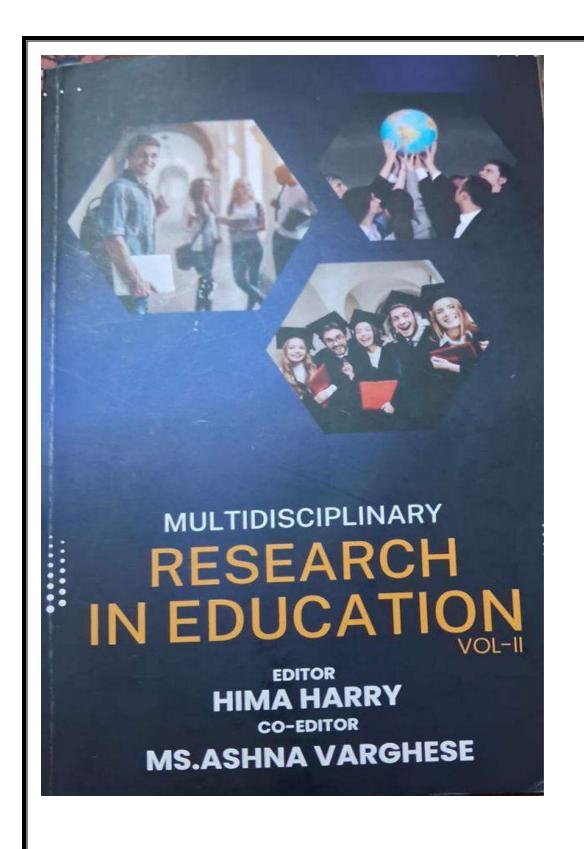
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Hima Harry, an author, Co-author, Editor and a poet who is interested in writing and teaching. Currently, she is working as an Assistant Professor at Carmel College, Mala. Her single authorship booktitled" The Revival of Virtues in the Realm of Literature" has published in 2021. She has published various research articles and poems in different journals. She has presented many research papers in National and International Conferences. She has achieved World Book of Record, Asian Book of Record and Indian Book of Record.

She has received Pillars of India award 2021. She has achieved Best Teacher Award in 2021 (Education Excellence Award ). She has edited three anthologies entitled "The Lap of Nature", "Euphoria" and "Elixia". She has published more than hundred poems. Her short stories titled "My Sobbing days", "My Identity and "Red Masks" have also published. She has contributed an article in Green StreetMagazine. She has participated in UNESCO International Mentoring Programme titled "Empowering Teachers for Developing Culturally Responsive Classroom.





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1.	GENDER ESSENTIALISM IN ONE PART WOMAN BY PERUMAL MURUKAN		
14	Rinsana Rahmath A  THE COMAPARTIVE ECO-CRITICAL STUDY OF  AMITAV GHOSH'S THE MODEL OF	119-127	
	MARKANDA YA'S NECTAR IN A SIEVE Nereparambil Sandra Voot	129-140	
15	ATWOOD'SSURFACING	141-150	
	THE PLIGHT OF THE THIRD GENDER: QUEST FOR		
16	BY LAXMI NARA YAN TRIPATHI, Shinshi K	151-162	
17	"REELS": A STANDARDIZATION STRATEGY IN THE CYBERSPACE Sifna Xavier		
18	HOW MEGHNA GULZAR'S FILM RAAZI BREAKS THE STEREOTYPES ON WOMAN IN INDIA Ms. Siya Abi	169-176	
19	DISMANTLING FIXITIES: IDENTITY AND HOME IN DIASPORIC FICTION Sreeparvathy A V	177-186	
20	PORTRA YAL OF WOMEN CHARACTERS: A READING OF SUDHA MURTY'S NOVELS, 'GENTLY FALLS THE BAKULA' AND 'HOUSE OF CARDS'. Tesma Joby	187-195	

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## Nonsense Literature: An analysis of The Walrus and the Carpenter written by Lewis Carroll

### Reshma T.M.

Assistant Professor on Contract Department of English MES Asmabi College, P.Vemballur

Abstract

Meaninglessness' is the least considering word in the life's dictionary of every individual. It is considered as something negative. But sometimes man may felt this meaninglessness in his negative. This meaninglessness is the essence of nonsense waks of life. This meaninglessness is the essence of nonsense literature. Literary nonsense is much more than mere nonsense. They use such words to create humorous situations in the work of they use such words to create humorous situations in the work of literature. The walrus and the carpenter by Lewis Carroll is a fine example of nonsense literature. This article analyse the poem as a nonsense poetry.

Key words: Nonsense literature, Lewis Carroll, death and betrayal,

"I love to talk about nothing. It is the only thing I know anything

### -Oscar Wilde

Man do everything for a purpose. He speaks reasonably. In fact man is considered as the most reasonable creature on earth. It is his rationality that differentiate him from other being on earth and giving him a superior position.

But he may not be reasonable all the time. There are times he speaks irrationally or insensibly. This may not be on purpose all the time. Though we may felt it absurd sometimes it

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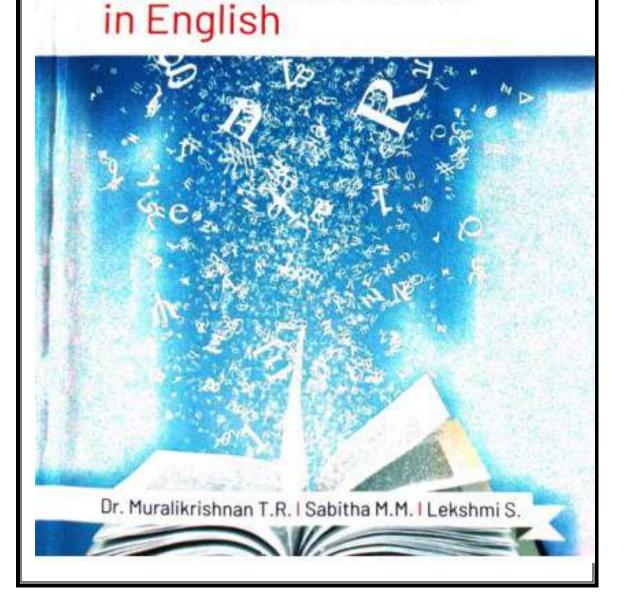
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### Nanotechnology in the Automotive Industry

Micro and Nano Technologies 2022, Pages 317-343

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Mohammad Re	za Saeb <sup>d</sup>		
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#### Abstract

This chapter provides a detailed description of the promising role of magnetic hybrid nanoparticles in coating technology adopted in marine industry, automobiles, aviation, medical implants, defence, electronics, and eventually industrial structure in oil and gas, fertilizer, metallurgical, and other industries. It was also attempted to give an image of the microstructure-properties relationship of coatings in terms of cure behavior and kinetics of hybrid coatings containing MNP. By the use of MNPs, it is possible to tailor various properties of coatings like anticorrosion, superhydrophobicity, self-healing, antifouling, and microwave absorption over a wide range of substrates including metals and fabrics. Latest trends practised in such coatings were concisely discussed. The mechanism of action of MNPs in facilitating special features to these coating was clearly depicted. We also aim to give a concise summary of the potential of MNPs in developing future protective coatings.

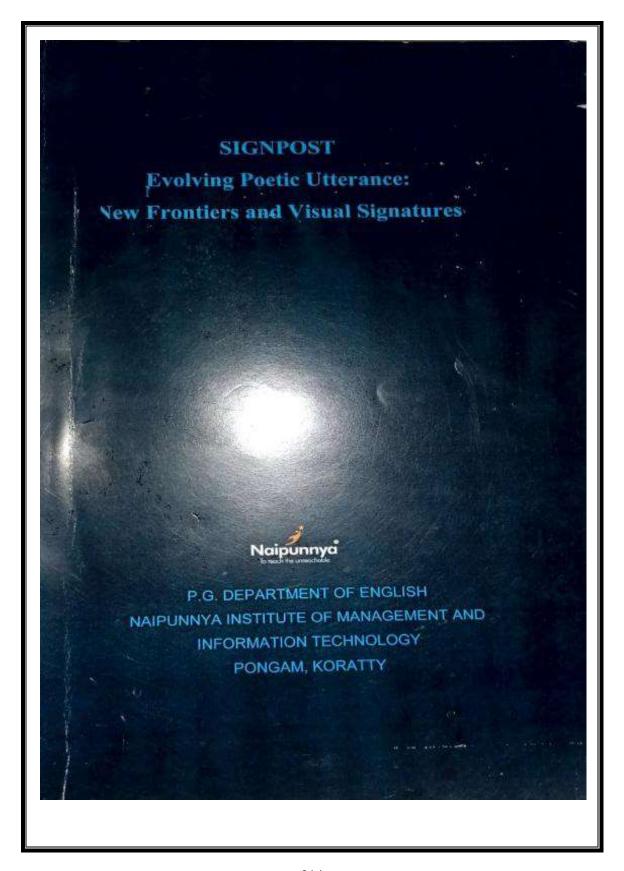
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Peregrination into the Human Psyche through Underlying Spiritual  $p_{\rm hilo}$  movie Manassinakkare

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# Peregrination into the Human Psyche through Underlying Spiritual Philosophy in the movie Manassinakkare

Jameelathu.K.A. Assistant Professor Research Department of English Mes Asmabi College P Vemballur

#### Abstract

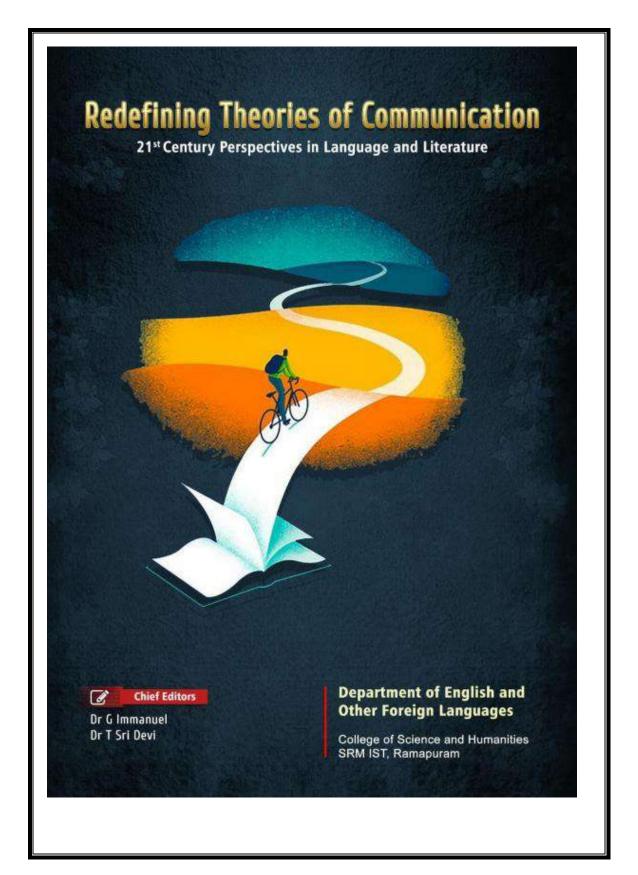
Movies act as a reformative medium from the time it has been initiated as an art form. A spiritualistic change that occurs when purified by "arousing pity and fear" as Aristotle said can really modify men by making them think reflectively on life and meaning of life. Religion, wealth and power are the tools with which we measure our happiness normally. But weiching an apt movie makes us think philosophically about life, shifting our mental texture from material leaning to the spiritual leaning and thus we start thinking about an egalitarian society Some movies pierce into our mind, making a trepidation within and topsyturvying our concept of life altogether. Malayalam movie "Manassinokkare", thus affects our conscience suggesting a lot many possibilities of burden free life showing the mysterious paths of Sixyphean life. The recurrence of life's frivolous, sometimes cruel mackery makes the movie more like a purgatory. It moves in like a well written poem to our heart and tickles our ego to shed itself as a snake's moult. The rustic greenery throughout the movie signifies the eco-related peacefulness and solemnity. The songs echo the strong relation of man and nature. The ideal and the real are ploced side by side in the movie. A middle generation moving towards thorough materialism and the old and the new turning towards the ideal rustic notion brings a paetic charm to the whole movie. An Eco-Culture evolving out of the Taoist philosophy is latent here and sometimes reflects through some of the characters

# Keywords: Purgatory, Taoism, Sisyphean, Eco-culture

#### Introduction

The thythm of the universe lies in the balanced life of humans and animals. Man should understand the value of and start practicing, aligning oneself to the natural way of cosmos, simple life. In that process, he gains the wisdom to

Signpost | 65



## Redefining Theories of Communication 21st Century Perspectives in Language and Literature

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#### Man as the Oppressor and the Oppressed: A Postcolonial and Psychological Perspective on the Malayalam movie Guru

#### Jameelathu KA

Assistant Professor, Research Department of English, MES Asmabi College P. Vemballur

#### Abstract

Movie as a mode of literary expressions and as a reformative medium functions with full effects ever since it has been normalized as a genre of literature. As a visual medium it has a special privilege to mingle with the soft emotions of human beings. It makes man think or reflect on his actions and the acts of society. Writers and directors with humanitarian sentiments have tried incessantly to bring about these reflections that may keep humanity away from the many social and environmental evils. Socially and environmentally important topics have been used by these writers to open the otherwise blind eyes of human beings. The director Rajiv Anchal and the writer C G Rajendra Babu had tried to bring about these reflections in human mind through their thought provoking 1997 Indian Malayalam Language funtasy drama film Guru. It ranges from all levels, i.e. psychological, spiritual, environmental and more clearly on postcolonial elements. Man as a victim of circumstances becomes the oppressor and the oppressed. In most of the cases he himself is the cause of his troubles and turmoil. When this primordial cause is identified, he will be isolated from the ignorant multitudes, the hero of the movie experiences this isolation and altenation due to his newly earned wisdom. This paper tries to analyse the underlying truth and its negligence as the root cause of human misery.

Keywords: reformative medium, fantasy drama, primordial cause, ignorant multitudes

#### Introduction

Man has been shown as the most complicated of all the species as he is the one who creates changes in the created world and he is the only one who uses an acquired language rather than the innate one which all the other species use. He makes everything complicated, his life and the lives of all the other creatures. He calls it development and boasts of his talents and achievements, mastering all the other beings enslaving them. The theories on which most of the researches are done analyses these complexities on which human world is built. Whether it is post colonialism, existentialism, psychoanalysis, gender theory, archetypal or any of this sort, it delves deep in to the maze-like human world in which man himself is the oppressor and the oppressed as it happened from the time immemorial since his origin. Man's consciential wisdom regarding his own frivolities might have caused him create stories regarding his own origin based on his own insolence and irrationality. The scriptures of all the religions in the world reflects on this frivolities and complications in his behavior.

Post Colonialism states that a study of human society in the modern world should have a base on European imperialism and its effect upon the human society. This theory emerged in the 80s and many other theories came side heading it. The concept of the colonizer and the colonized, the oppressor and the oppressed is basic to it and these terms are relative to various circumstances. The Palastinian American critic Edward Said in his work Orientalism discusses this as a theory first and it is taken over by Homi.K Baba, Gayathri Spivak etc. Post Colonialism is a theory which is used to analyse the selected movie, i.e. Malayalam language drama fantasy movie. Garu in this paper. Another theory which is also used to analyse this movie in connection with Post Colonial theory is Psycho Analytical theory first laid out by Sigmund Freud in the late 19th Century. The first realm of human psyche 'Id' that is the repository of all animosity in human psyche and superego which is the purveyor of all moralities are more focused in this paper than ego or the normal state. Movies sometimes act as the voice of human conscience and to fulfill its directions man is inefficient at times. Various characters in the movie proves that individual human being is responsible for individual suffering and the specialty of the unconscious mind make man the oppressor and the oppressed.



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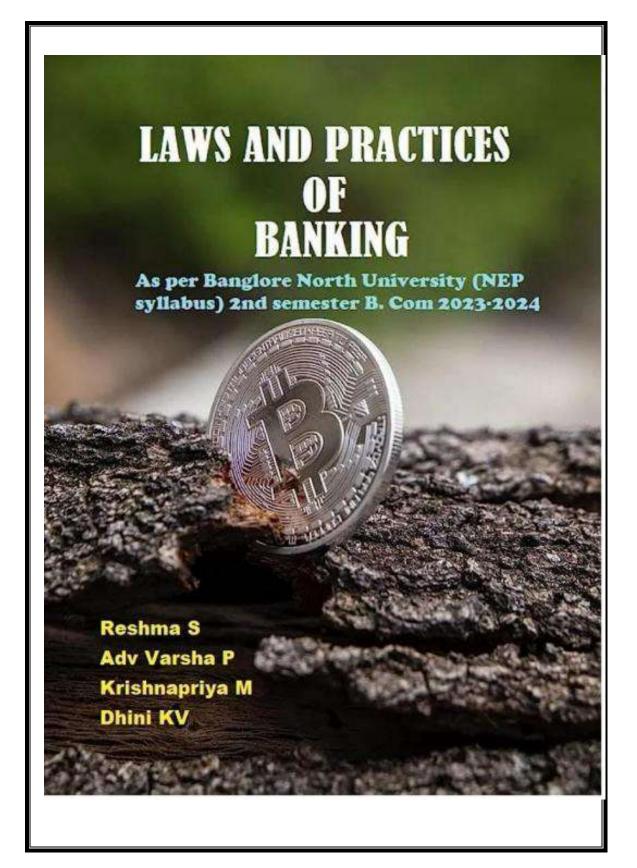
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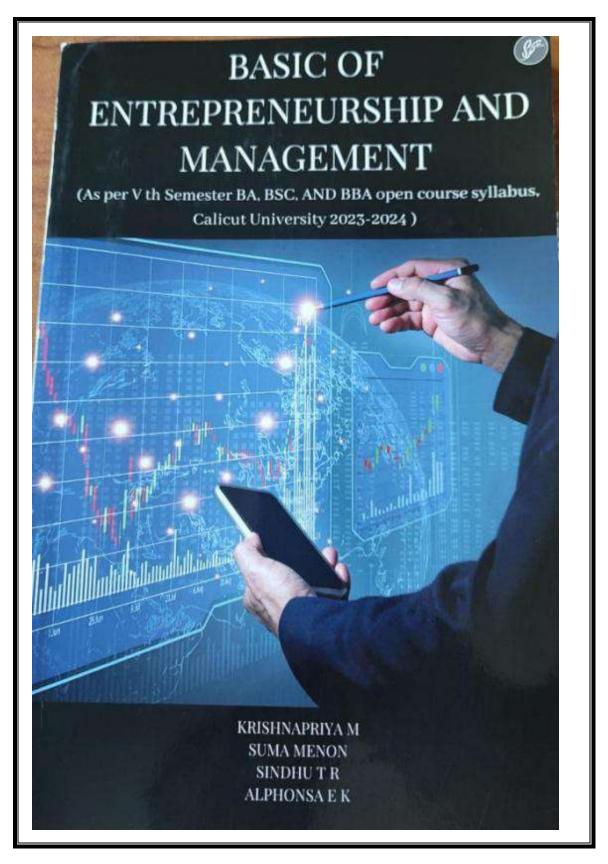
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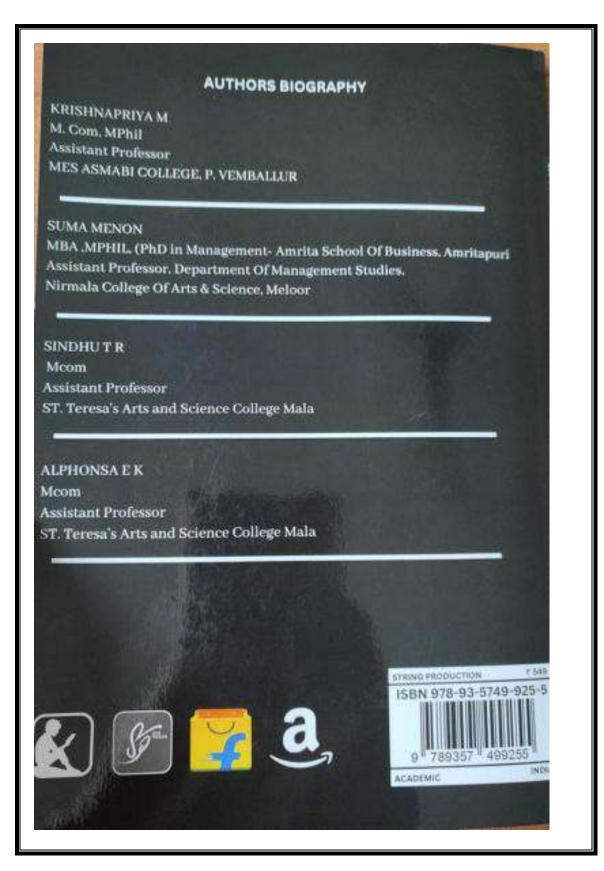
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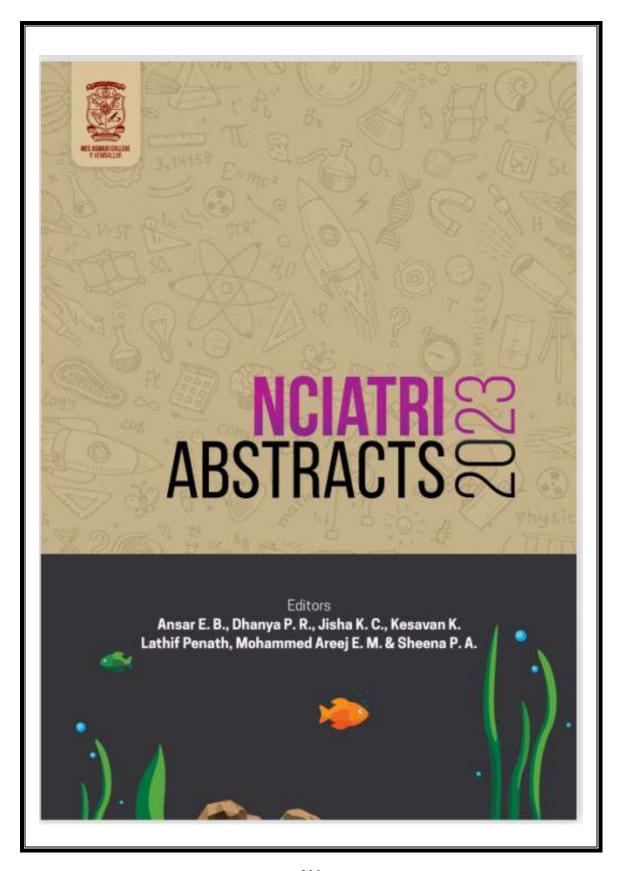
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# Contents

SI. No.	Title & Authors	Page No
1	Prospects of Crustacean Culture and Its Economic Value in Ornamental Aquaculture Aditya Iswaran, Selvaraju Raja & Rajeswari S.	1
2	Price Spread of Fishes in Thrissur District Alisha Ashik*, Shijin C. V., Adhilshan, Fathimath suhara P. A., Hyfa P. & Dhanya Pulikkottil Bajan	2
3	Post Monsoon Induced breeding of Ikan koi Kabuto slayer carp, Cyprinus carpio (Cyprinidae) using WOVA FH Alister C. S.*, Ahammed Rashid C. R., Riswana V. N., Hafidha, Muhammed Adhil C. S., Vinitha Vijayan & Kesavan K.	3
4	Prevalence of Antibiotic Resistance Among Environmental Bacterial Isolates from Central Coast of Kerala, South India  Aneesa K. R*, Mujeeb Rahiman K. M., Habeeb rehman H., Fidha Najam, Najma Yousafali & Zubair A. A.	4
5	Comparative Study on Biofloc & Cage Culture System in the Production of Tilapia  Anjaly Ratheesh*, Aishwarya K. V., Thanhath T. S., Devapranav, Dilsemariyam & Shibu A.  Nair	5
6	Impact of Malathion on the Biochemical Composition of the Freshwater Fish, Oreochromis Mossambicus Chitra K. C. & Sunniya Abdu	6
7	Quantification and Characterization of Microplastics pollution in the Fishing Zone of Singanallur Lake at Coimbatore, Tamil Nadu, India Ephsy K. Davis & Selvaraju Raja	7
8	Isolation and Identification of Vibrio Species from Selected Harbours of Calicut District Fathina Nesrin P.	8
9	Promotion of Aquaculture in Edavilangu Grama Panchayat, Thrissur District, Kerala Fida Rasheed*, Shahul Hameed P. H., Anjana Vinod, Laya T. P., Njanalakshmi P. S. & Shibu A. Nair	9
10	Biogenic Synthesis of Copper Nanoparticles Using Bacterial Strains Isolated from Soil and Yeast: Characterisation and Potential Application as Antimicrobial Agent  Hunais Babu E*& Shamla A K.	10
11	Comparative Analysis of the Common Marine Fish Species in Tanzania and India Joyce M. R.*, Hassan K. S., Akmala S., Iffath A., Mushiha K. F. & Shibu A. Nair	11

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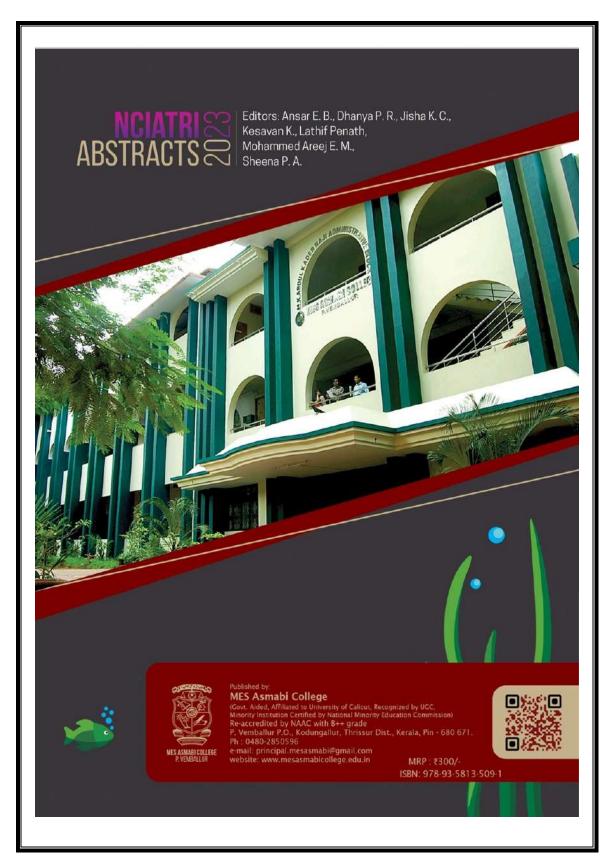
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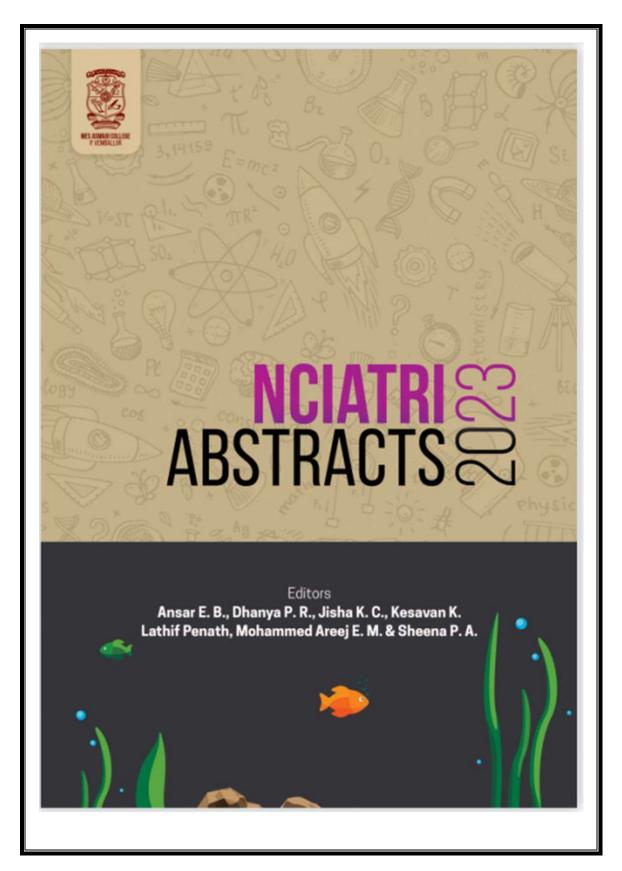
Alisha Ashik\*, Shijin C. V., Adhilshan, Fathimath suhara P. A., Hyfa P. & Dhanya Pulikkottil Rajan
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\*Corresponding author: ashikalisha7@gmail.com

Marketing is an important activity in the marine fisheries sector of our country. Efficiency at marine marketing system could be assessed by analysing the price behaviour of retail markets and landing centres. The paper analysis the price spread of marine fish marketing system in Thrissur district. It was found that there is price difference in different marketing channels. The price spreading occurs mainly through marketing margins, percentage share of fisherman and auctioneer, ice charge, electricity, labour charge, transportation charge, fuel charge, wholesaler charge, retailer charge and vendor charge. The main harvested and marketed fishes are mackeral, sardine, squid, prawn, pink perch and tuna. Tuna has the highest cost among these. The result particularly highlight the need for formulating a uniform market policy for fishes for easy operation and regulation of countries fish production.

KEYWORDS: Fish Consumption, Monthly Expenses, Mackerel, Cheap Source.





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# Contents

SL. No.	Title & Authors	Page No.
12	Isolation and Identification of Vibrio Species from Selected Beaches of Calicut District Jumping E.P.	12
13	Breeding Standardization, Conservation & Biological Disease Control Of  Etroplus suratensis  Muhammed Bin Faroog	13
14	Fish Consumption Pattern in Thrissur District  Neely T*. G., Sandra S Nair, Anusree M. P., Goptka K S., Ruksana, Krishnanand T. D. & Dhanya  Pulikkottil Rajan	14
15	Habitat Variation and Diversity of Zooplankton in Ponnani Waterbodies with Special Reference to Water Quality Raseena Thasni C. M.* & Rinshi Balu	15
16	Nutritional Enhancement of Edible Oils Using Crustacean Shell Waste Sayana K. A* & Sumayya K. S.	16
17	Status of Needle Fish Landing and Length Size Range of <i>Tylosurus acus</i> melanotous From Androth Island Lakshadweep Shahul Hameed P. V. P*. & Ranjeet K.	17
18	Study on Gut Content of Lunar Tailed Big Eye (Priacanthus hamrur) Shameem Ayyappankandathil*, Amrutha Sivadas & Kesavan K.	18
19	Chemical & Physical Food Safety Hazardsin Aquaculture Farms: A Study in Kodungallur Area in Thrissur District Sreelakshmi T.P.	19
20	Influence of Chilled Storage on the Biochemical, Sensory and Microbial Quality of Frigate Tuna (Auxis thazard) Meat.  Sugaina Sulaiman M. S.	20
21	Assessment of Mosquito Vector Diversity Across Habitats in the Thiruragadi Municipal Area Sumana P.*, & Shameema Kodasseri	21
22	Diversity of Coral Reef Fishes of Amini Island of Lakshadweep Archipelago Thayyiba P.* & Bijoy C	22
23	Growth Performance Study of Anabas Testudineus by Utilization of Prawn Shell Waste as a Potential Fish Feed Ingredient  Ujjwala Navas	23
24	Marketing Margin and Price Spread of Ornamental Fishes in Selected Districts in Kerala Valshna P. U.	24
25	Fre shwater Fish Diversity in Bharathapuzha River, Kerala Veena V., Sasikala G. & Selvaraju Raja	25

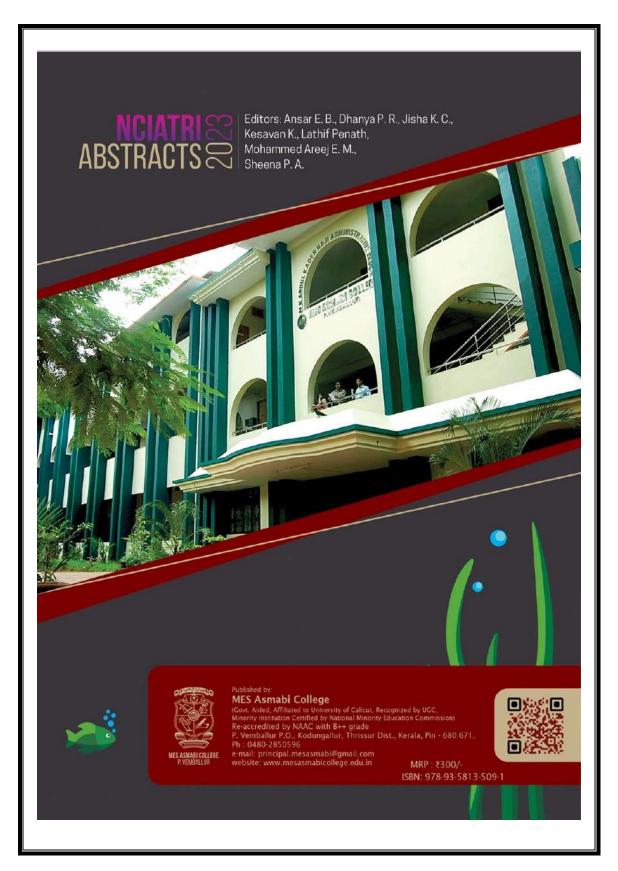
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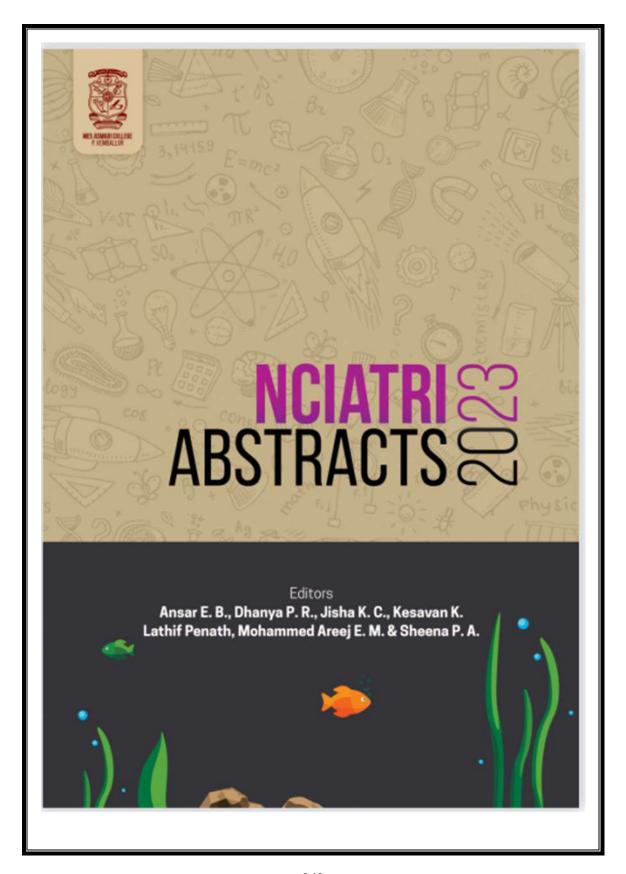
# Fish Consumption Pattern in Thrissur District

Neely T. G.\*, Sandra S Nair, Anusree M. P., Gopika K. S., Ruksana, Krishnanand T. D. & Dhanya Pulikkottil Rajan Dept. of Aquaculture, MES Asmabi College, P. Vemballur, Kodungallur, Kerala. \*Corresponding author: neelytg2012@gmail.com

Kerala is one of the important marine fish producing and consuming state in India. Fishes are generally considered as cheap sources of protein and good quality nutrition for human consumption. The paper presents a brief account of abundance of fish consumption among different people. The result particularly highlights the monthly expense spent for fish consumption by people in Thrissur District. It is observed that sardine, mackerel and prawn are mostly consumed fishes. It is noted that mackerel (Rastrelliger kanagurta) is the most favoured fish by the population in Thrissur District. Per head consumption pattern of fish was greater for the lower class followed by the middle and upper class.

KEYWORDS: Fish, Consumption, Monthly Expense, Mackerel, Cheap Source.





# NCIATRIS ABSTRACTS

# Editors:

Ansar E. B., Dhanya P. R., Jisha K. C., Kesavan K., Lathif Penath, Mohammed Areej E. M. & Sheena P. A.



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# Contents

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# Post Monsoon Induced breeding of Ikan koi Kabuto slayer carp, Cyprinus carpio (Cyprinidae) using WOVA FH

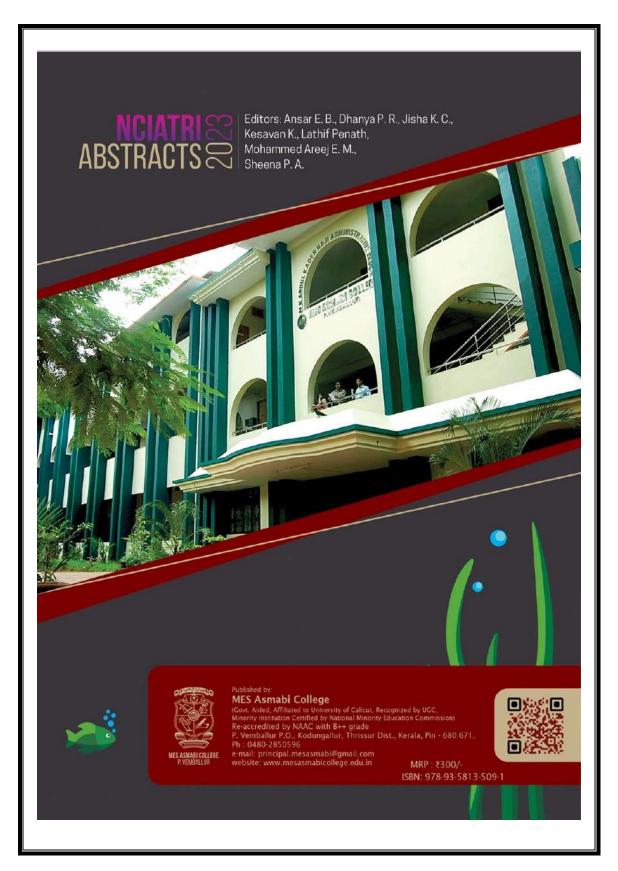
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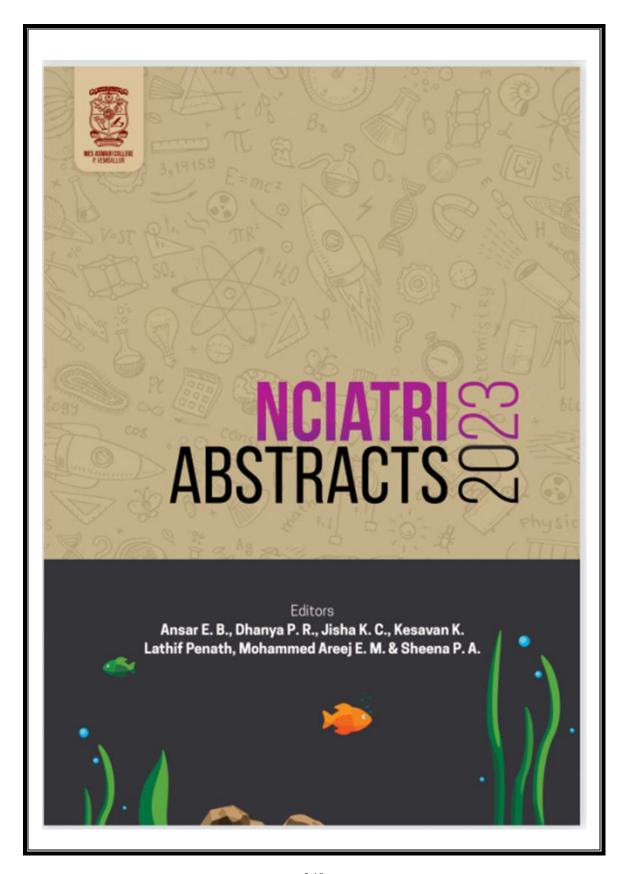
Dept. of Aquaculture, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.

\*Corresponding author: alistersiju@gmail.com

The aim of the present study was to perform induced breeding and to observe the larval development of Ikan Koi Kabuto slayer carp (Cyprinus carpio) using WOVAFH. The experiment was carried out in aquaculture facilities set in the department of Aquaculture MES Asmabi College. Fishes were brought to the laboratory in the third week of January 2023, conditioned for one week in freshwater of appropriate quality. After sexing of mature specimens intramuscular injections of WOVA-FH were administered. The dosage of WOVA-FH applied was 0.5 ml/Kg weight. Spawning occurred after 6-8 Hrs of injection. Ordinary tiles in inverted position were set as egg collectors. Egg count, and fertilisation rate were calculated. Eggs were treated with methylene blue to prevent possible infection. Eggs hatched after 48 hrs. post spawning. Larvae are fed with food developed from a packed starter feed 'colostrum. The larval growth is observed and recorded.

KEYWORDS: Cyprinus carpio, Induced Breeding, WOVA-FH, Larval Development.





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# Contents

SI. No.	Title & Authors	Page No.
12	Isolation and Identification of Vibrio Species from Selected Beaches of Calicut District Jumping E.P.	12
13	Breeding Standardization, Conservation & Biological Disease Control Of Etroplus suratensis Muhammed Bin Farooq	13
14	Fish Consumption Pattern in Thrissur District  Neely T*. G., Sandra S Nair, Anusree M. P., Gopika K S., Ruksana, Krishnanand T. D. & Dhanya Pulikkottil Rajan	14
15	Habitat Variation and Diversity of Zooplankton in Ponnani Waterbodies with Special Reference to Water Quality Raseen a Thusni C. M.* & Rinshi Balu	15
16	Nutritional Enhancement of Edible Oils Using Crustacean Shell Waste Sayana K. A.* & Sumayya K. S.	16
17	Status of Needle Fish Landing and Length Size Range of Tylosurus acus melanotous From Androth Island Lakshadweep Shahul Hameed P. V. P*. & Ranjeet K.	17
18	Study on Gut Content of Lunar Tailed Big Eye (Priacanthus hamrur) Shameem Ayyappankandathil*, Amrutha Sivadas & Kesavan K.	18
19	Chemical & Physical Food Safety Hazardsin Aquaculture Farms: A Study in Kodungallur Area in Thrissur District  Sreelakshmi T.P.	19
20	Influence of Chilled Storage on the Biochemical, Sensory and Microbial Quality of Frigate Tuna (Auxis thazard) Meat.  Sugaina Sulaiman M. S.	20
21	Assessment of Mosquito Vector Diversity Across Habitats in the Thiruragadi Municipal Area Sumano P.*, & Shameema Kodasseri	21
22	Diversity of Coral Reef Fishes of Amini Island of Lakshadweep Archipelago Thayyiba P.* & Bijoy C	22
23	Growth Performance Study of Anabas Testudineus by Utilization of Prawn Shell Waste as a Potential Fish Feed Ingredient Ujjwala Navas	23
24	Marketing Margin and Price Spread of Ornamental Fishes in Selected Districts in Kerala Valshna P. U.	24
25	Fre shwater Fish Diversity in Bharathapuzha River, Kerala Veena V., Sasikala G. & Selvaraju Raja	25

# Study on Gut Content of Lunar Tailed Big Eye (Priacanthus hamrur)

Shameem Ayyappankandathil<sup>1\*</sup>, Amrutha Sivadas & Kesavan K.<sup>2</sup>

PG & Research Dept. of Aquaculture and Fishery Microbiology, MES Ponnani College, Ponnani, Malappuram, Kerala.

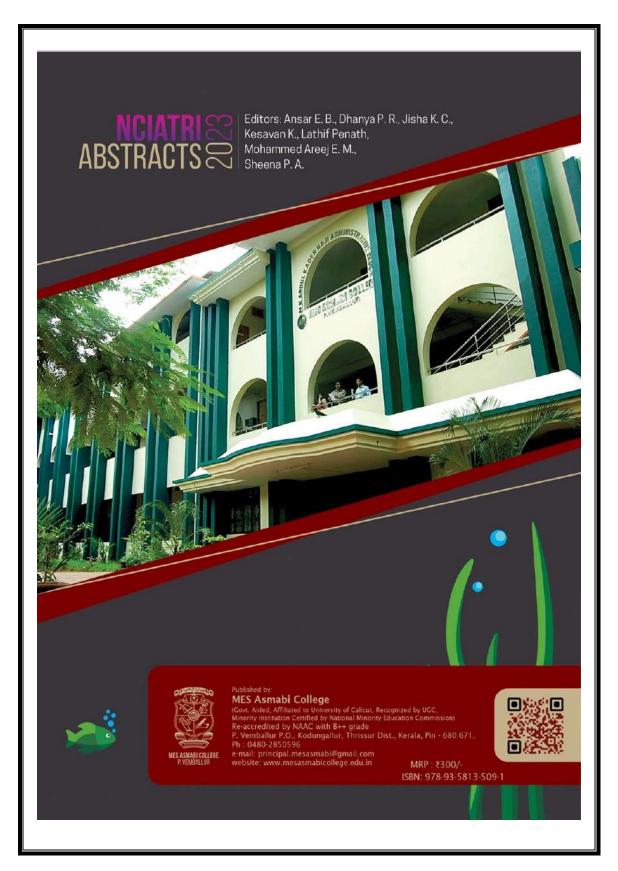
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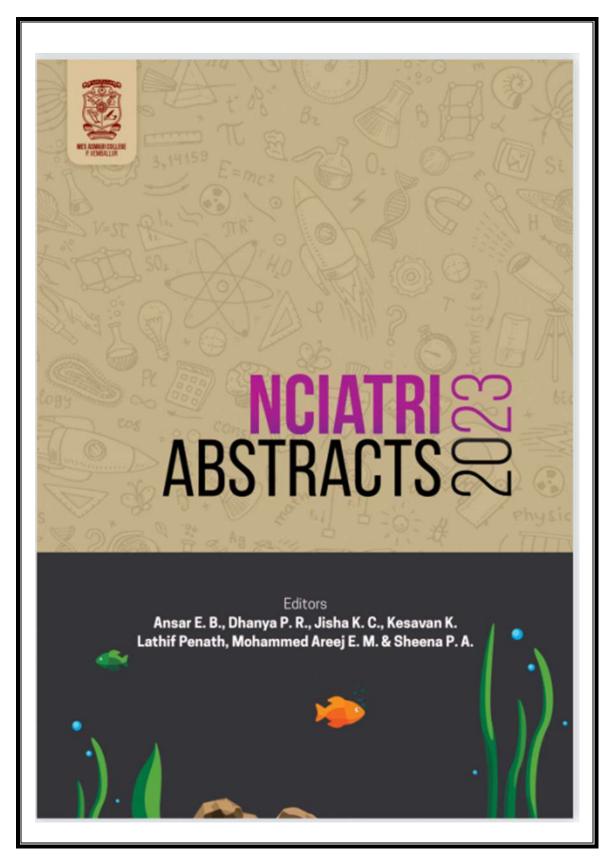
\*Corresponding author: akshameem26@gmail.com

Fish gut content analysis provides a general information about the feeding patterns of a fish. Quantitative assessment of feeding habits is important in management of fisheries. Through the analysis of gut content a better idea about the fish diet is also identified Fish diet is an integration of many components which are ecological' important which includes behavior, condition, habitat use, energy intake and different inter-intra specific interactions etc. Valid information about fish diets and feeding habits gives an idea. To analyze the gut content of the selected species using different methods and critically assess the gut content in relation to feeding habits of the fish. The samples were collected from Munambam harbour, Thrissur district There are a total of 4 samples collected on different dates of one week interval starting from 09/02/2022 and all these were females, three of them were immature ones and the other one was a specimen with mature ovary. The specimens were transported immediately obtaining them from the harbor by packing in polythene covers containing crushed ice. Priacanthus hamrur is exclusively carnivorous Crustaceans are the most preferred food item of the fish. Though other food items are also seen in the gut the fish seems to show selectivity towards crustaceans. The food items like amphipods (component of benthic fauna) in the gut are an indicator of the fish as a demersal fish. But frequent appearance of planktonic organisms like calanoid copepods and sergestids gives the impression that the fish finds its prey in water column as well.

KEYWORDS: Priacanthus hamrur.

26





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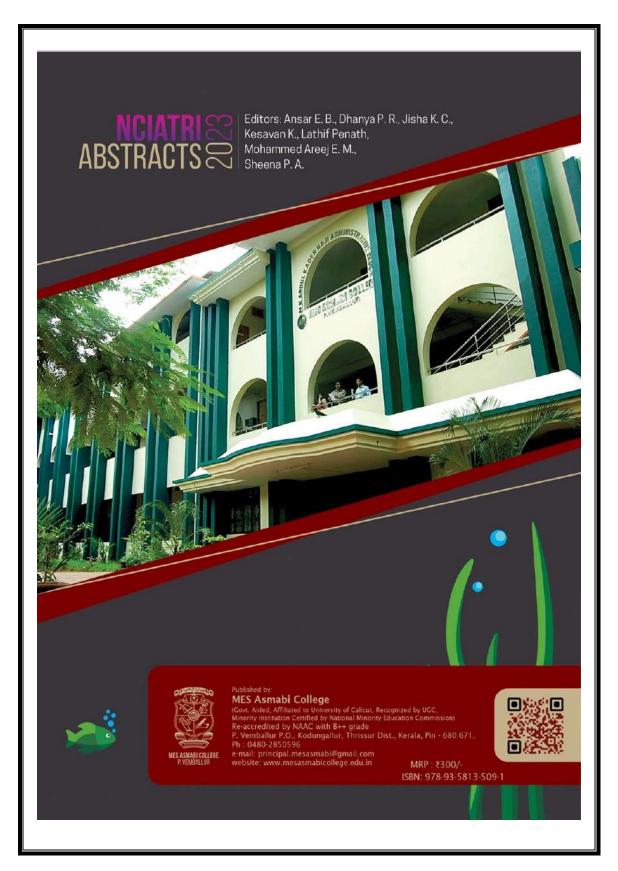
# Comparative Study on Biofloc & Cage Culture System in the Production of Tilapia

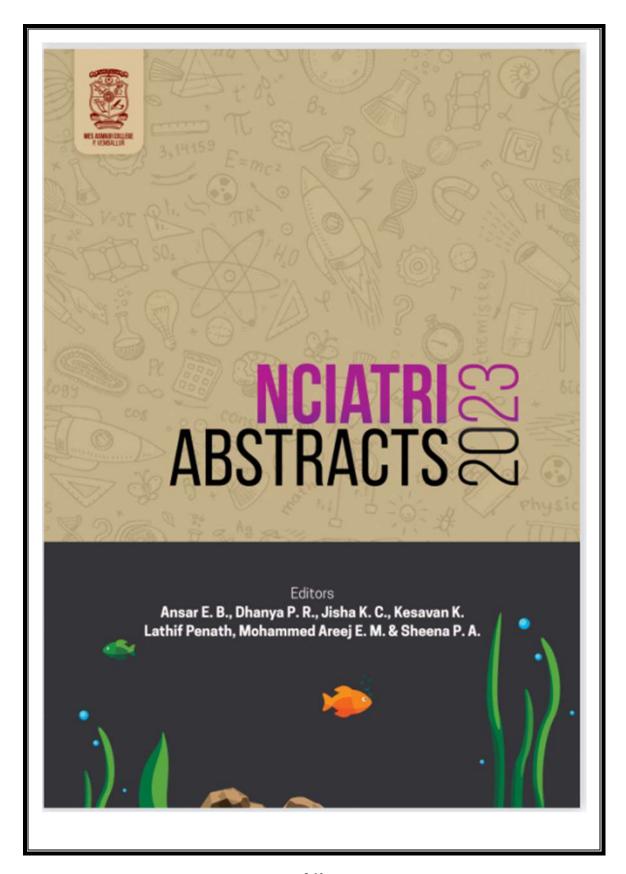
Anjaly Ratheesh\*, Aishwarya K. V., Thanhath T. S., Devapranav, Dilsemariyam & Shibu A. Nair Dept. of Aquaculture, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.

\*Corresponding author: anjalyratheeshanju@gmail.com

Tilapia culture presents high potential for income generation and hunger alleviation in developing countries. Suitable culture technology can help to achieve such goals sustainably. This work aimed to comparatively evaluate the influence of cage culture and Biofloc. The result indicated that output can be improved with production system. From the comparative reports cage culture is the most profitable, environment friendly and less man power culture system.

KEYWORDS: Biofloc, Production System, Profitable, Income Generation.





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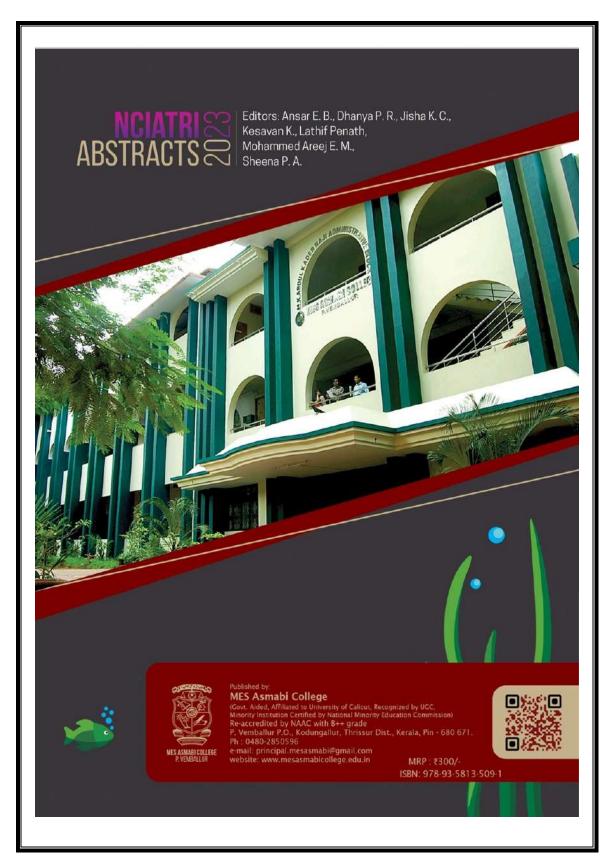


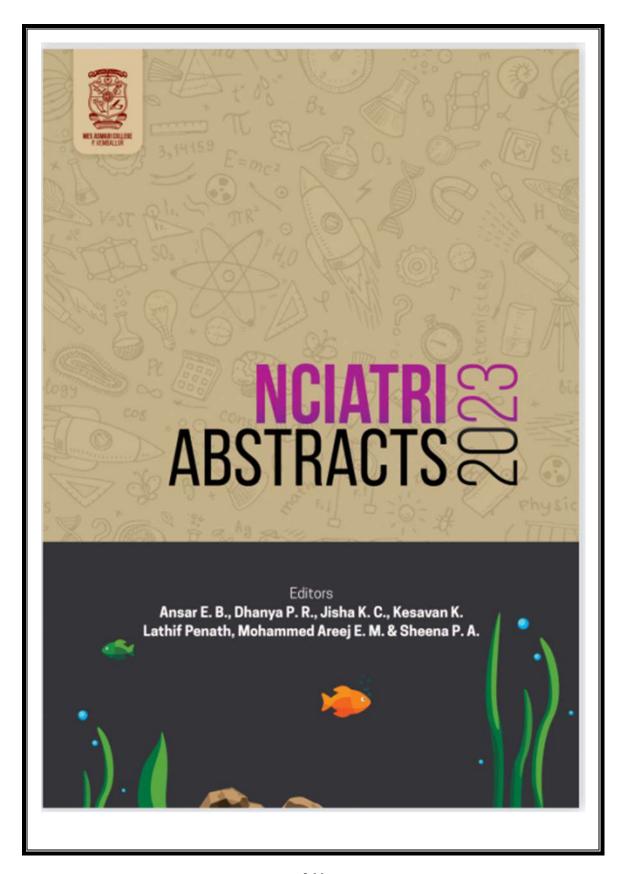
## Promotion of Aquaculture in Edavilangu Grama Panchayat, Thrissur District, Kerala

Fida Rasheed\*, Shahul Hameed P. H., Anjana Vinod, Laya T. P., Njanalakshmi P. S. & Shibu A. Nair Dept. of Aquaculture, MES Asmabi College, P. Vemballur, Kodungallur, Kerala. Corresponding author: fidufid123@gmail.com

Aquaculture contributes to poverty alleviation as it provides employment to millions of people. The major systems of culture practiced are Aquaponics, Biofloc, Recirculating Aquaculture System and Tarpaulin pond. This study attempts to present the involvement of central and state governments in promotion and development of aquaculture through local bodies. The study is conducted in Edavilangu Grama Panchayat. The study reveals women empowerment and social upliftment. The financial assistance was made by PMMSY of central government and Government of Kerala. PMMSY contributed 60% of fund for women, SC and ST entrepreneurs. 40% of fund was contributed by Government of Kerala. Due to such financial assistance from central and state governments, potential use of water bodies, women empowerment and overall social development was realised.

KEYWORDS: Development, Women Empowerment, PMMSY.





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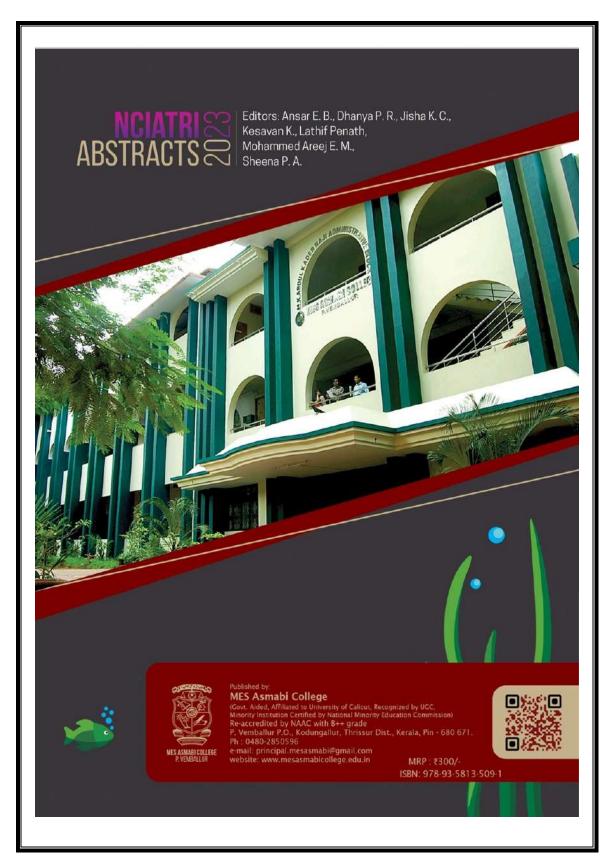
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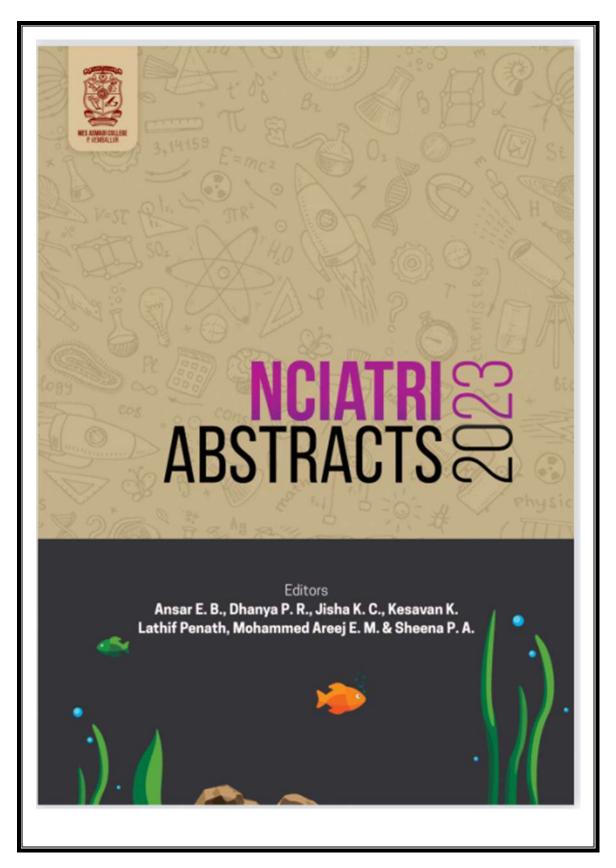
\*Corresponding author: jmraphael08@hotmail.com

Fisheries resource refer to the products or output that arises from capture fishery and Aquaculture, more than 120 million people throughout the World are estimated to depend on fish their income hence ensuring food security and raising the protein level of nation's populace and improving their welfare. The paper presents a brief comparative analysis of the most common marine fish species in Tanzania and India. The result particularly highlights that India has wide range of water bodies and varieties of fishes. It has observed that most of states in India are access to ocean and sea making them available in the market.

Tanzania having almost similar varieties of fish but having inland water bodies that have unfamiliar fish species. Species such as Peacock grouper, India mackerel, Indian squids, Sword fish, Giant tiger prawn and King fish are observed to be most dominated in Tanzania and India. The price of almost all species differ slightly depend on the availability of the species and market demand in Tanzania and India.

KEYWORDS: Fish, Marine, Common Species, Price Variation.





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1	Prospects of Crustacean Culture and Its Economic Value in Ornamental Aquaculture Aditya Iswaran, Selvaraju Raja & Rajeswari S.	1
2	Price Spread of Fishes in Thrissur District Alisha Ashik*, Shijin C. V., Adhilshan, Fathimath suhara P. A., Hyfa P. & Dhanya Pulikkottil Bajan	2
3	Post Monsoon Induced breeding of Ikan koi Kabuto slayer carp, Cyprinus carpio (Cyprinidae) using WOVA FH Alister C. S.*, Ahammed Rushid C. R., Riswana V. N., Hafidha, Muhammed Adhil C. S., Vinitha Vijayan & Kesavan K.	3
4	Prevalence of Antibiotic Resistance Among Environmental Bacterial Isolates from Central Coast of Kerala, South India  Aneesa K. R*, Mujeeb Rahiman K. M., Habeeb rehman H., Fidha Najam, Najma Yousafali & Zubair A.A.	4
5	Comparative Study on Biofloc & Cage Culture System in the Production of Tilapia  Anjaly Ratheesh*, Alshwarya K V., Thanhath T. S., Devapranav, Dilsemariyam & Shibu A. Nair	5
6	Impact of Malathion on the Biochemical Composition of the Freshwater Fish, Oreochromis Mossambicus Chitm K. C. & Sunniya Abdu	6
7	Quantification and Characterization of Microplastics pollution in the Fishing Zone of Singanallur Lake at Coimbatore, Tamil Nadu, India Ephsy K. Davis & Selvaraju Raja	7
8	Isolation and Identification of Vibrio Species from Selected Harbours of Calicut District Fathima Nesrin P.	8
9	Promotion of Aquaculture in Edavilangu Grama Panchayat, Thrissur District, Kerala Fida Rasheed*, Shahul Hameed P. H., Anjana Vinod, Laya T. P., Njanalakshmi P. S. & Shibu A. Nair	9
10	Biogenic Synthesis of Copper Nanoparticles Using Bacterial Strains Isolated from Soil and Yeast: Characterisation and Potential Application as Antimicrobial Agent Hunais Babu E*& Shamlo A.K.	10
11	Comparative Analysis of the Common Marine Fish Species in Tanzania and India Joyce M. R.*, Hassan K. S., Akmala S., Iffath A., Mushiha K. F. & Shibu A. Nair	11

	ARCTR	

#### Impact of Malathion on the Biochemical Composition of the Freshwater Fish, Oreochromis Mossambicus

Chitra K. C. <sup>1</sup> & Sunniya Abdu<sup>2\*</sup>

<sup>1</sup>Dept. of Zoology, University of Calicut, Thenhipalam, Kerala, India.

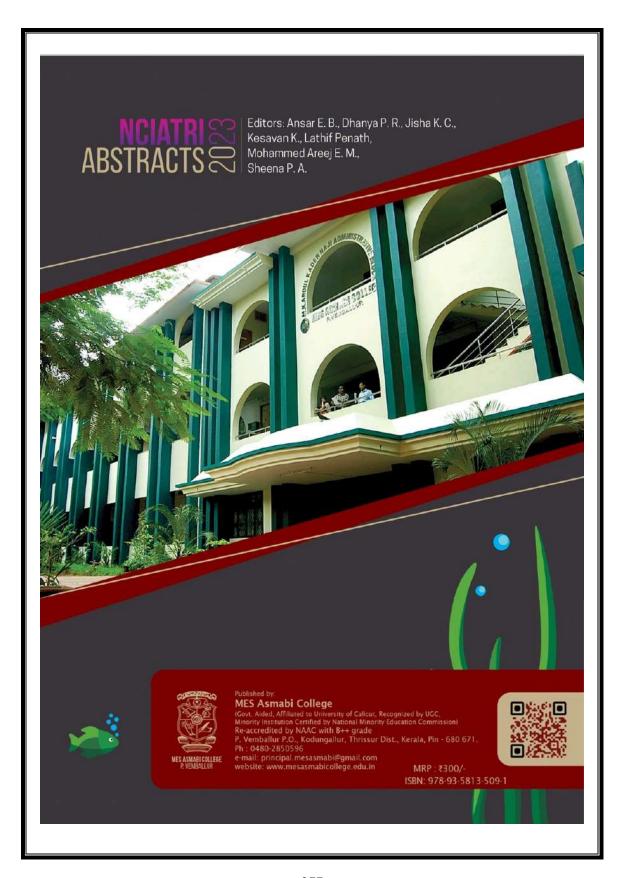
<sup>2</sup>Dept. of Aquaculture, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.

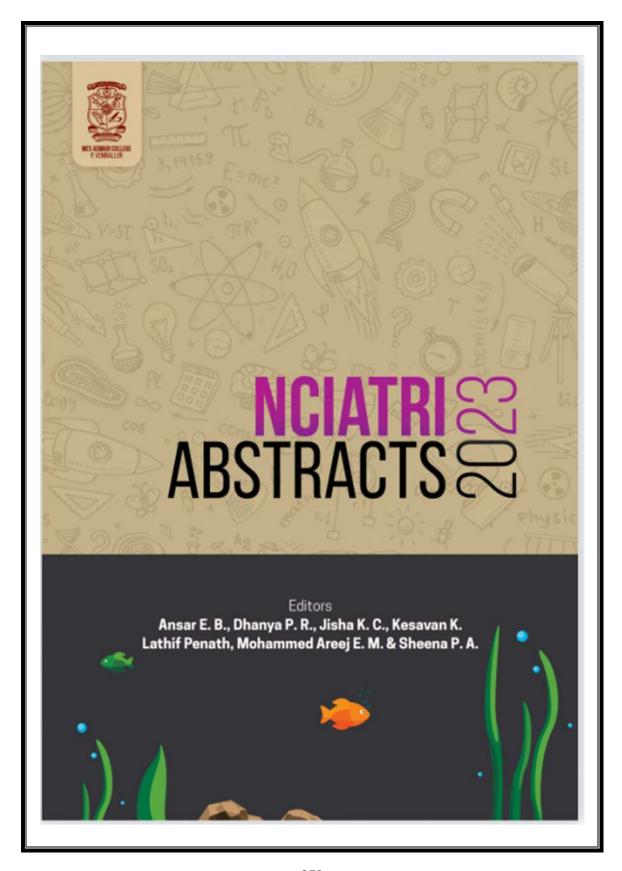
\*Corresponding author: sunniyaabdu@gmail.com

The aim of the present study was to evaluate the effect of malathion on the antioxidant status in the liver of adult freshwater fish, Oreochromis mossambicus. Malathion at sublethal concentration (0.125 mg/L) was used as the test dose and the treatment was given for 24, 48 and 96 h to ten animals in each group maintaining a control group. Malathion generates reactive oxygen species in the liver of the fishes which is evident by the time-dependent reduction in the antioxidant enzymes and concomitant increase in the lipid peroxidation. However, there were no significant changes in the antioxidant parameters in brain of malathion-treated fishes. Thus the present study reveals that the antioxidant enzyme potential is very poor in liver when compared with that of brain. On the other hand, the present study also showed a significant decrease in the marker enzyme, alkaline phosphatase in the liver after 96 h of malathion treatment. Alkaline phosphatase, a hydrolyase enzyme are involved in the mediation of membrane transport and transphosphorylation.

A decreased alkaline phosphatase activity in liver of malathion-treated animal indicate the decreased state of inter and intracellular membrane transport and possibly this could be due to the toxicity of malathion. In the malathion-treated fishes, the hepatocytes have lost their normal architecture and large number of these cells appeared with pyknotic nuclei. The intrahepatic blood vessels were dilated and congested with blood, and inflammatory leucocytic infiltrations were also observed. Numerous hepatocytes showed marked cytoplasmic vacuolization. Thus malathion induces toxic stress to the exposed fishes, which is obvious by the histopathological changes in the liver. Thus the present study reveals that malathion induced oxidative stress in liver of Oreochromis by inducing reactive oxygen species generation.

KEYWORDS: Malathion, Liver, Antioxidant Enzymes, ROS, Alkaline Phosphatase, Oreachromis.





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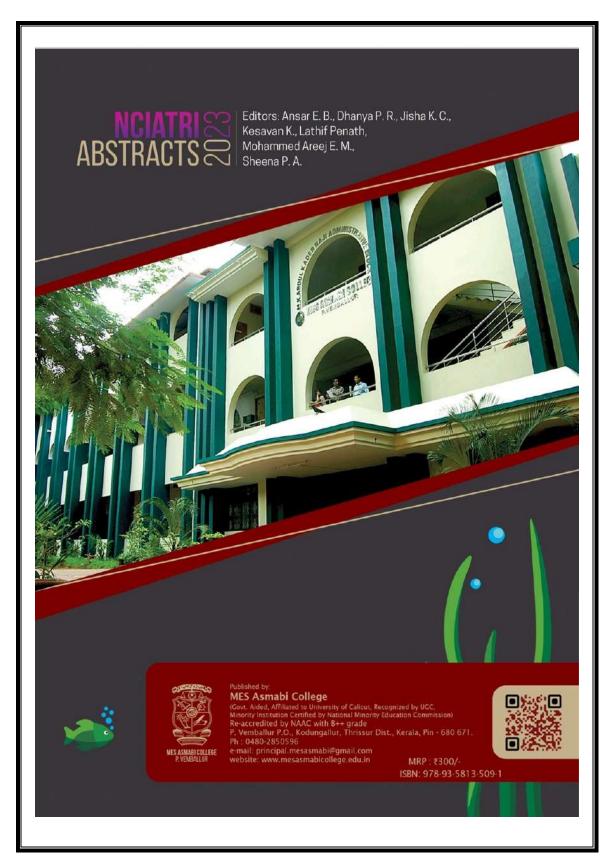
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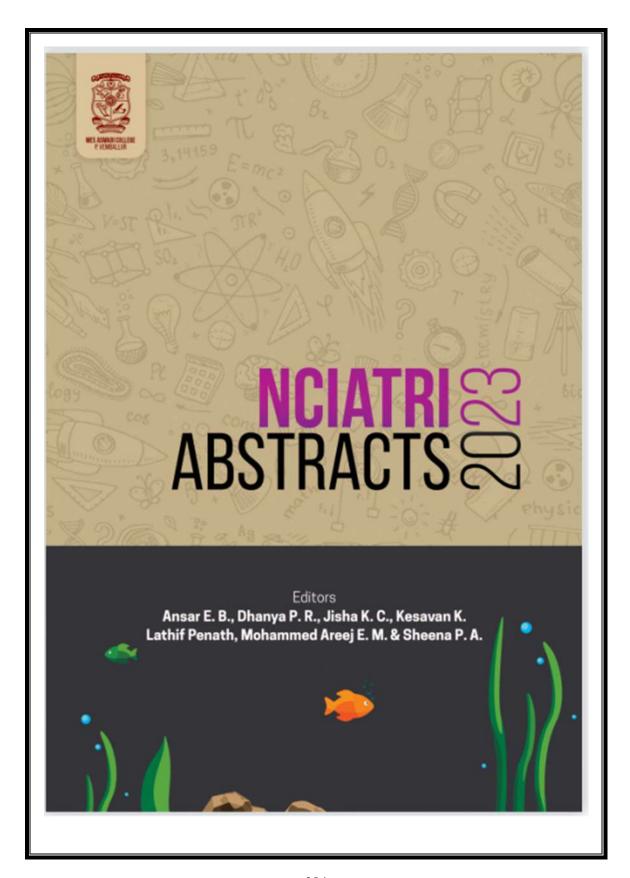
Sayana K. A.\* & Sumayya K. S.

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Enormous increase in shrimp shell waste production has been accounted as a major problem faced by seafood industry globally. Even though growth in shrimp utilisation and export is a reason for global development, on other side the impacts are also growing abundantly. The primary way for discarding this waste is dumping into water resources including oceans which causes intense environmental pollution (Suresh 2012). Hence reutilisation of shrimp shell waste has emerged as new area of research since decades. Shrimp shell contains numerous bioactive components such as chitin, fatty acids, amino acids, minerals and pigments which has different industrial applications. The current article presents the simplest way to utilise shrimp shell waste to enhance nutritional quality of edible oil, sunflower oil. The only nutritional elements present in sunflower oils are fats and fat-soluble vitamins. Here presents a simplest method to incorporate active ingredients from shrimp shell to oil, boiling the oil with shell waste in it. Using the waste generated from one kg of shell waste used in one litre of oil and the results showed enhancement in minerals such as potassium, sodium, calcium and zinc and a fractional increment in protein is also reported.





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# Influence of Chilled Storage on the Biochemical, Sensory and Microbial Quality of Frigate Tuna (*Auxis thazard*) Meat.

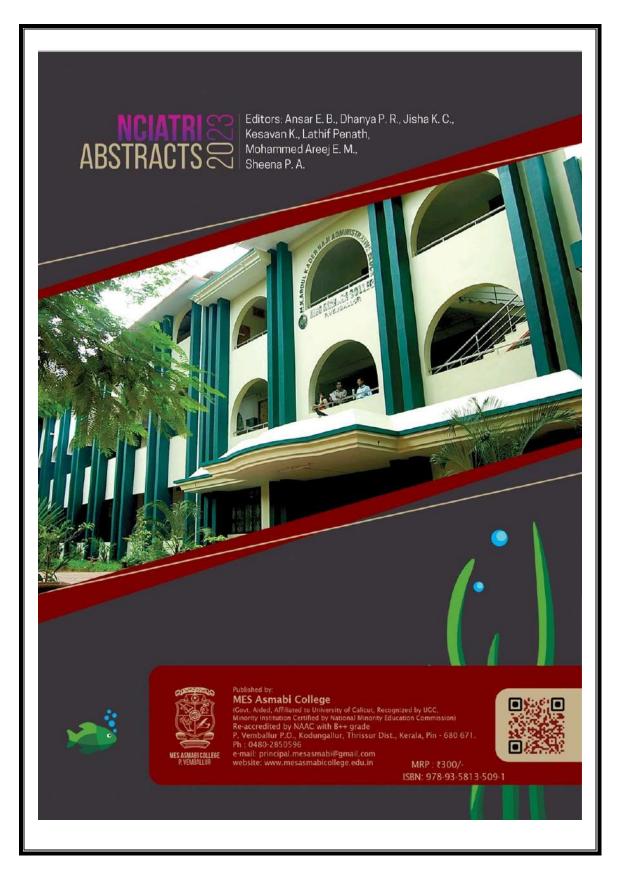
Sugaina Sulaiman M. S.

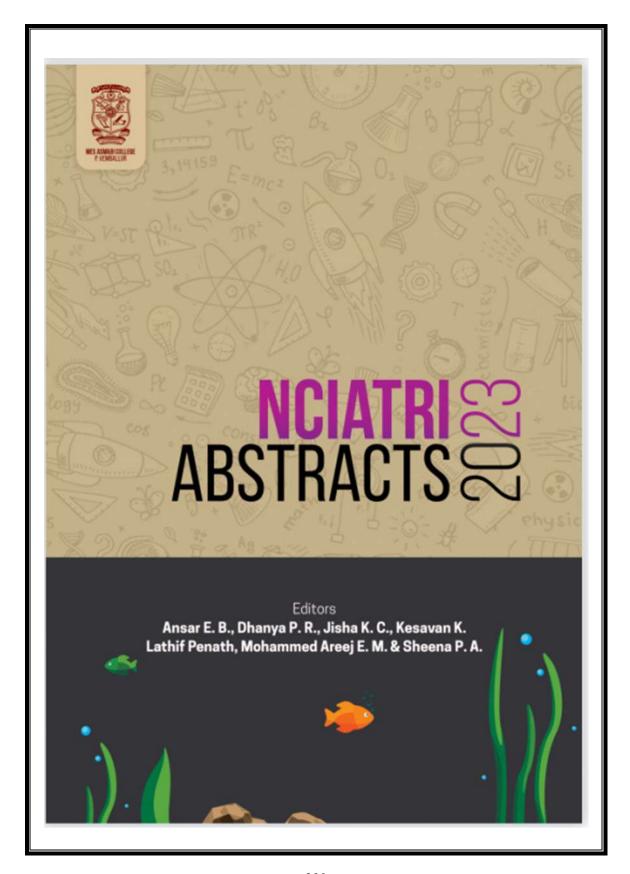
Dept. of Aquaculture, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.

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The biochemical , bacteriological and organoleptic changes in Frigate Tuna (Auxis thazard) meat during chilled temperature storage have been studied. In this study tuna sample collected from Ponnani harbour in Malappuram district. There was a decrease in the proportion of soluble fractions of protein during storage. it was observed that the initial value of the TVBN in the meat was low,TVBN content increased on storage from an 0.75% to 1.85% ie, it does not increased acceptable limit. Moisture content of the white meat was 73.7% and moisture content of the red meat was 71.4%. The proportion of the crude protein in white meat 18.90% and red meat was 18.28%, the moisture content registered a steadily increase from 73.7% to 76.3% over 16 days. The initial bacterial load was 1.23\*10 cfu in iced condition the colony counts variation are obtained microbial parameters such as V.cholerae and E.coli was absent in storage condition. The overall organoleptic quality of the meat progressively deteriorated over the period of storageon the 16th day, the meat had slightly fair in condition. However no bad odour was noticed during any stage of this study. Finally, storing tuna fish meat for up to 14 days exhibited no detrimental nutritional consequences and the safe for consumption.

KEYWORDS: Tuna, Frozen Storage, Soluble Proteins, Quality Changes.





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#### Chemical & Physical Food Safety Hazardsin Aquaculture Farms: A Study in Kodungallur Area in Thrissur District

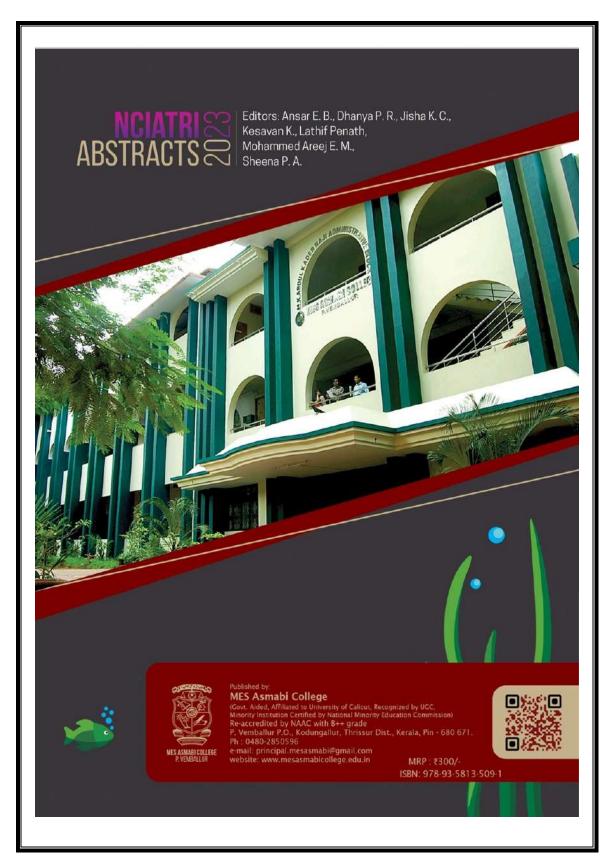
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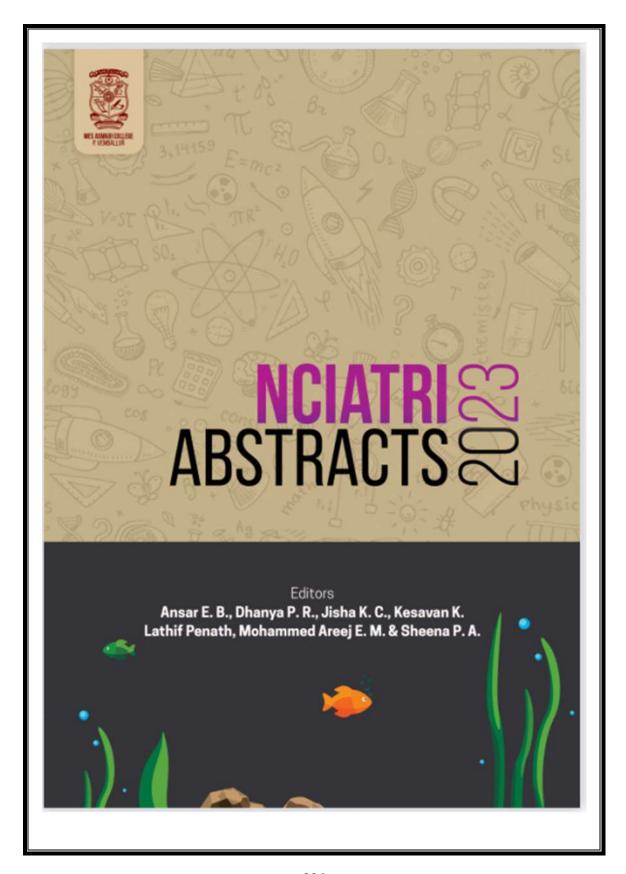
The project report entitled to "Chemical & Physical food safety hazards in aquaculture farms: a study in Kodungallur area Thrissur district." The main objective of the study is to comparatively analyze farmers experience and expertise with the steps taken in avoiding chemical & physical hazards in farm. It is the process to list down the possible chemical & physical hazards based on the literature. To carry out the survey about possible chemical & physical food safety hazards in aquaculture farm in Kodungallur area. Primary data is collected through survey questionnaires, for this questionnaire will be framed. Altogether 22 farmers were interviewed from the Kodungallur area. Secondary data related to this study were collected from various sources such as government publications, National & International journals, and books from CUSAT library, published and unpublished thesis and related websites.

The various tools used for the study SPSS version 23 & Microsoft excel 2013. Tables and frequency distribution table were used for better understanding. Through the analysis of frequency distribution table, we get an idea about the chemical and physical hazards in the aquaculture farms.

The survey showed that the various responds about the chemical and physical food safety hazards in aquaculture farms in Kodungallur area. From the data in Kodungallur area most of the farmers aware about the chemical and physical food safety hazards. On the other hand, some of them have no idea about this. The study recommends to Use only non-persistent chemicals and set of guidelines for environmentally sound aquaculture practices which can help prevent the indiscriminate use of chemicals.

KEYWORDS: Chemical Hazards, Non-persistent Chemicals, Food Safety.





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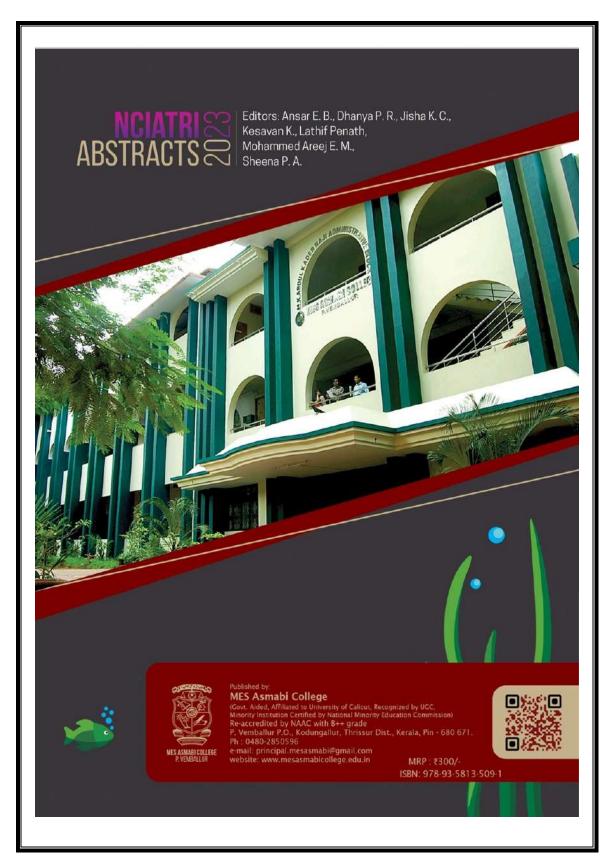
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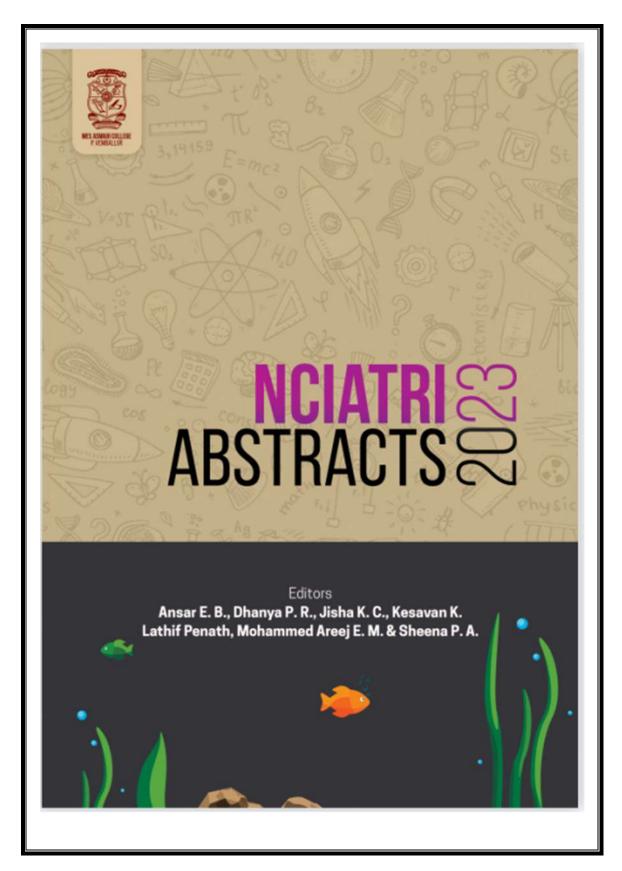
Ujjwala Navas

Dept. of Fish Processing Technology, M.E.S. Asmabi College, P. Vemballur, Kodungallur, Kerala Mail id: ujjwalanavas80@gmail.com

Fish meal is habitually considered as the major protein source in fish feed for fish culture. Rising cost, deteriorating quality and unavailability of fishmeal caused huge difficulty in modern aquaculture, particularly for fish nutrition. Nearly all *Anabas testudineus* cultures faced loss, due to high feed costs, inappropriate feed formulation and management. So it was necessary to find a profitable replacement of fishmeal, which could provide better growth performance to *A. testudineus*. A feeding trial was conducted for 120 days in 200-L circular fibre tanks with proper aeration, to compare the influence of prawn shell waste, in the formulated diet and commercial feed for *A. testudineus*. Anabas fishes were collected from a local farm and are distributed into two fibre enforced tanks, 5 fishes were stocked in each tank for comparing fish growth rate and feed utilization. This study revealed that the prawn shell waste were tested and confirmed satisfactory results, having 33.4% protein.

KEYWORDS: Prawn Shell Waste, Formulated Feed, Growth Performance.





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24	Marketing Margin and Price Spread of Ornamental Fishes in Selected Districts in Kerala $\it Valshna P. U.$	24
25	Fre shwater Fish Diversity in Bharathapuzha River, Kerala Veena V., Sasikala G. & Selvaraju Raja	25

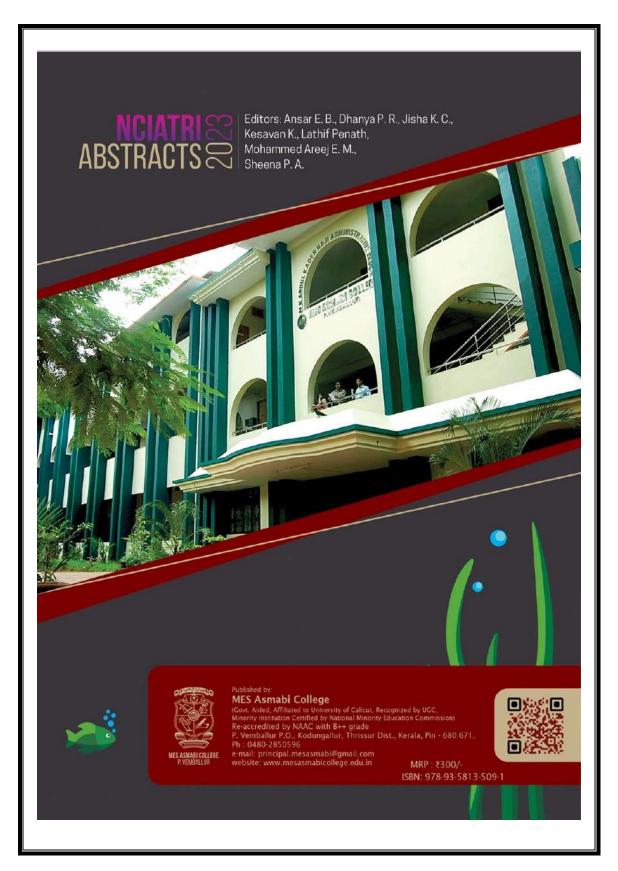
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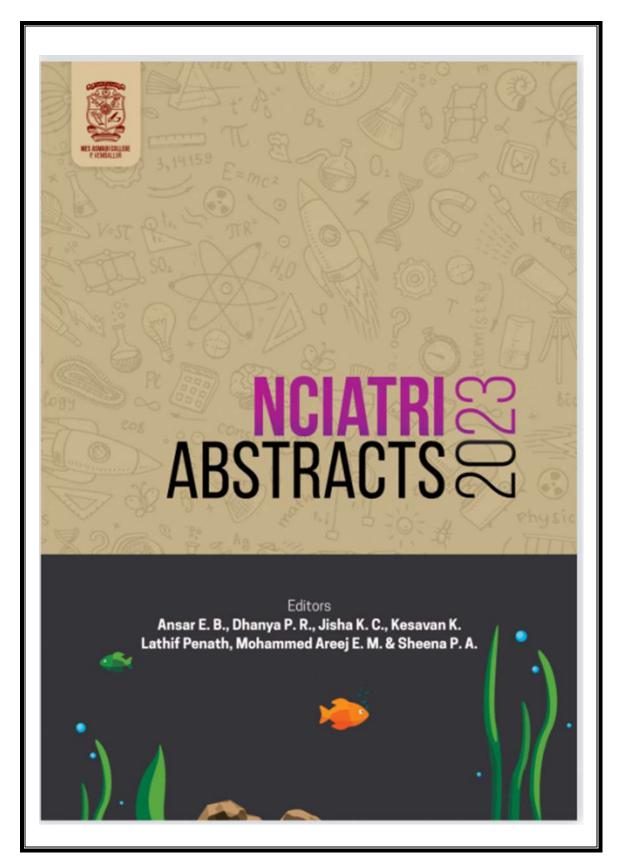
## Marketing Margin and Price Spread of Ornamental Fishes in Selected Districts in Kerala

Vaishna P. U. Dept. of Aquaculture, MES Asmabi College, P. Vemballur, Kodungallur, Kerala. Mail id: vaishnaarun13@gmail.com

The present study was under taken to know aquarium fish marketing system in the districts of Thrissur and Ernakulam. A total number of 9 ornamental fish shops were randomly selected. A lot of studies related to ornamental fish marketing have been conducted during past decades. By analyzing marketing cost and price spread, the current status of ornamental fish business in the market, and also the profit percentage earned by the breeder, rearer, wholesaler, and retailer at different marketing channel can be understood. . The ornamental fish shops were found to be the primary source of livelihood for these people and maximum units were retail outlets. In ornamental fish trade, price is determined as "rate per piece" and this caused a high difference among producer's price, wholesaler's margin and retailer's margin of same species. Inappropriate quarantine of the stock, lack of good colouration, lack of good strain and unsteady demand also affected the wholesalers. Fishes were imported mostly from Kolkata, Chennai and Mumbai whereas sometimes they bought fishes from foreign countries as well. Gold fish (Carrassius auratus) was the most preferred groups in market. Improper health management practice, seasonal fluctuation in price, high wholesale rate and lack of finance was considered as the most significant problem inhibiting the growth of retail industry. The analysis revealed that the intermediaries were grabbing a significant share of the consumer's rupee.

KEYWORDS: Price Spread, Marketing Costs, Wholesale Price, Retail Price.





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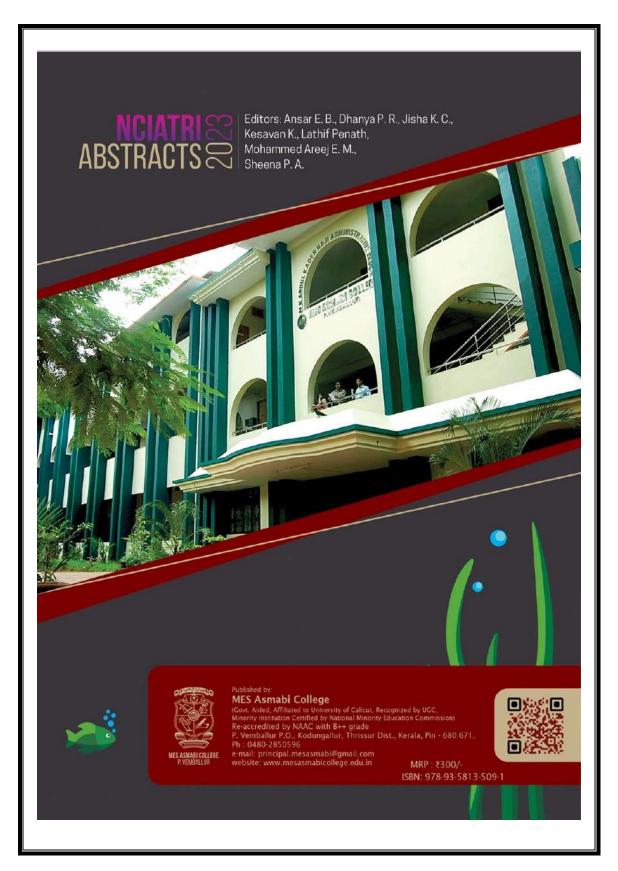
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26	Ecofriendly Synthesis of Silver Nanoparticles from Aqueous Leaf Extract of Piper nigrum L and Evaluation of Its Antimicrobial Activity Against Infectious Pathogens Aparna U. & Rekha K.	26
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29	Evaluation of Antigenotoxic Potential of Turmeric Extract Against Sodium Pottassium Tartrate, a Food Additive  Merrin George & Rekha K.	29
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31	Crop Improvement of Ginger (Zingiber officianale Rosc.) Through Biopriming Sum(tha Thomas* & Jisha K. C.	31
32	Production and Purification of Lasperginase Enzyme Using Bacillus Spp and It's Anti Cancer, DNA Damage Analysis  Anusree K. M., Hasna Shahana E. N., Fathima Safa V. P., Ahsana K., Mohamed Shefin K. P., Rincy C. K. & Raghuna ndan	32
33	Invitro and Insilico Studies of Certain Curcumin Analogues' Antibacterial Effect Lovely Jacob A & Tom Cherian	33
34	Synthesis of Novel Anthracene-male imide Adduct Derived Difunctional and Trifunctional Mechanophore Incorporated Poly (Methyl Methacrylate) for Stress Sensing and Self Healing Applications Nishad K. M.*, Rani Joseph, Prathapan S.	34
35	Microstructure and Mechanical properties of Friction Stir Welded Az31 Magnesium Alloy Rahul R., Radhakrishna Panicker M. R., Job P. A.	35
36	Interaction of Two Heterocyclic Derivatives on Carbon Steel in 1M HCl Medium: Gravimetric, Electrochemical and Quantum Chemical Approach Reeja Johnson	36
37	Development of Micro Encapsulated Chitosan Nanocomposites and Its Biomedical Applications Risha Fathima, Sana T. P., Shamila Thasni M., Rahana Sherin V. P., Rosna Rasheed, Seena P. & Ragunathan R.	37
38	Fermatean Fuzzy Soft Rough Sets and Its Application in Decision Making Nasreen A., Latha S Nair	38

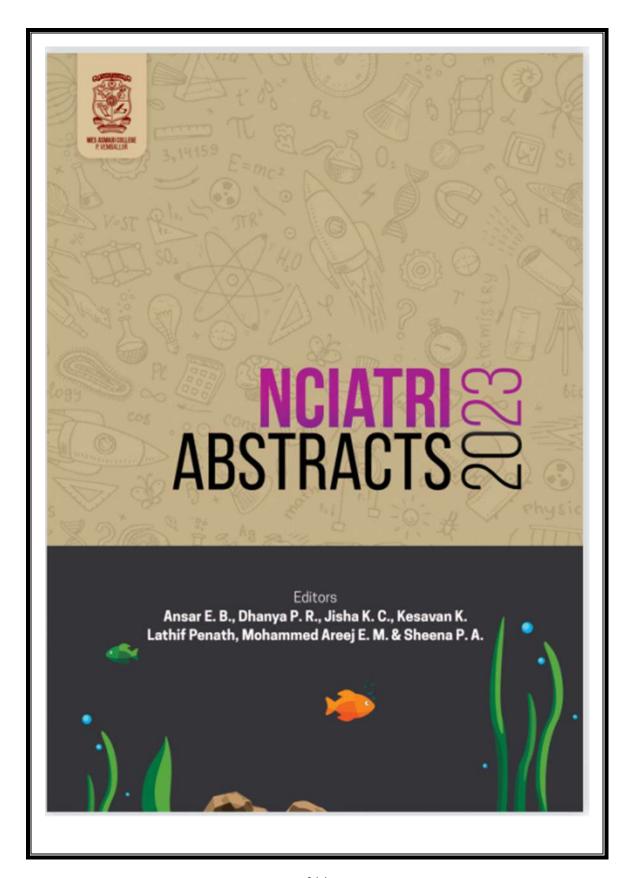
#### Priming Enhances tolerance to Waterlogging Stress in Turmeric Varieties (*Curcuma longa* L.)

Athira T. R.\* & Jisha K. C.
Research & PG Dept. of Botany, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.
\*Corresponding author: trathira48476@gmail.com

Waterlogging (S) is one of the major abiotic stresses limiting turmeric growth, yield and stability in areas with excessive rainfall. In this study, three different rhizome priming techniques-hydropriming (H), halopriming (N), and KNO3 priming (K)-were used as an attempt to increase the water logging tolerance in two turmeric varieties, Prathibha (T) and Pragati (G). In contrast to the control, primed-waterlogged plants maintained their growth and yield on the fourth day following two days of waterlogging. The results showed that waterlogging treatment significantly raised levels of carbohydrates, protein, proline and H2O2, and decreased levels of MDA, demonstrating turmeric's high resistance to waterlogging stress. It also showed that waterlogging treatment did not reduce the amount of photosynthetic pigment. Hydro-primed Prathibha under stress (THS) and KNO3-primed Pragati under stress (GKS) had the highest photosynthetic pigment and protein content. Proline content was found to be higher in both primed waterlogged turmeric varieties, while Pragati had a higher concentration. Carbohydrate content was lower in the leaves of primed waterlogged plants but was found higher in roots. The yield was higher in primed turmeric varieties and waterlogging did not significantly reduced it. The highest yield was found in halo-primed Pragati (GN). When all applications were compared with the control, the primed Prathibha varieties were less affected by waterlogging and more tolerant than the others. The present study suggested that rhizome priming is an alternative and more effective method to increase tolerance in turmeric varieties when exposed to waterlogged conditions.

KEYWORDS: Priming, Tolerance, Turmeric, Waterlogging.





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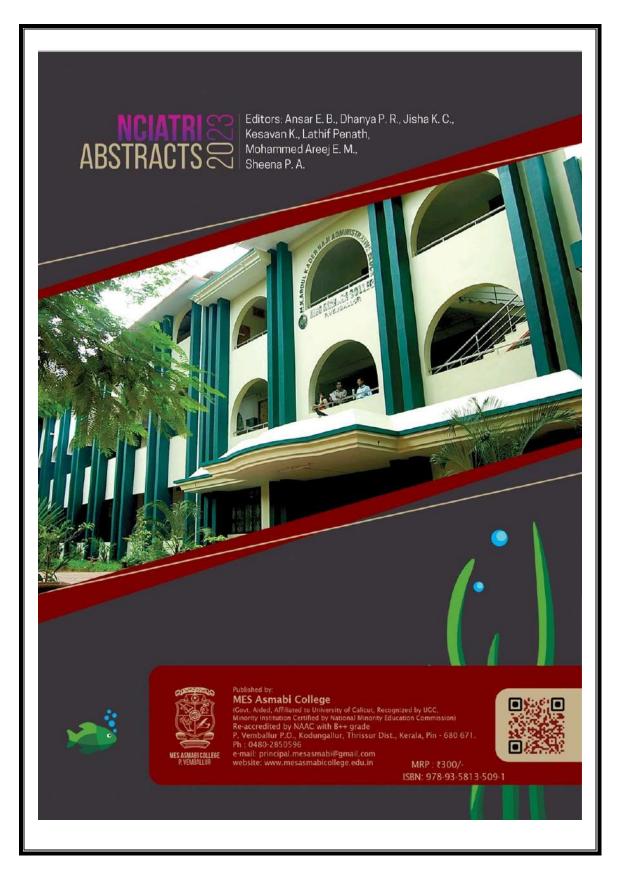
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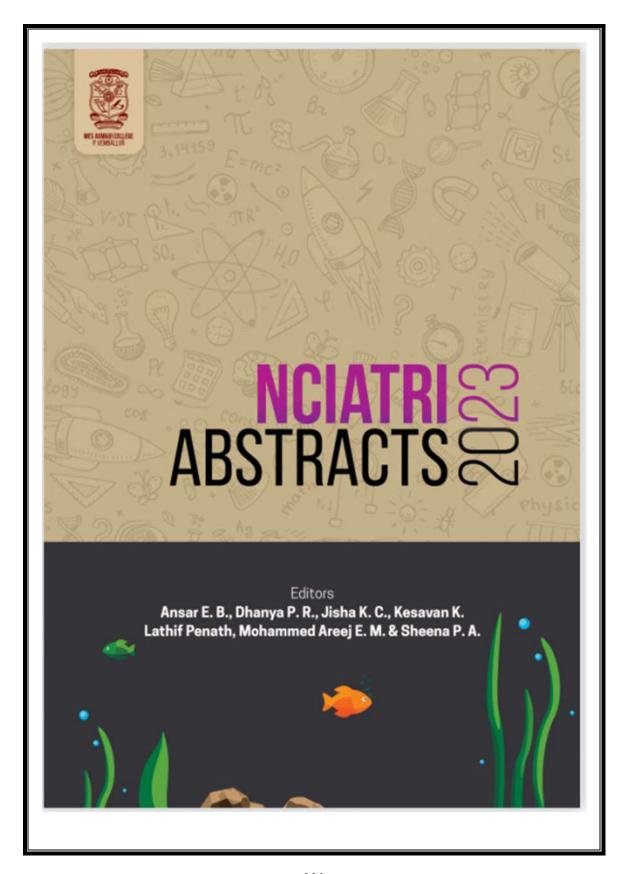
#### Crop Improvement of Ginger (Zingiber officianale Rosc.) Through Biopriming

Sumitha Thomas\* & Jisha K. C.
Research & PG Dept. of Botany, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.
\*Corresponding author: sumithat07@gmail.com

Ginger (Zingiber officianale Rosc.) is a crop which mainly cultivated for its underground spicy rhizomes. Currently various methods are adopting for crop improvement, among these techniques, priming is the best method for a griculturist for the better establishment of crops. Various chemicals, UV rays, magnetic field, nanoparticles and biological organisms are used as priming agents. In this work, ginger (var. Karthika) is primed with various concentrations (105-109 cfu) of Pseudomonas fluorescence, a well-known bacterium that is widely used for crop improvement program. Surface sterilized ginger rhizome cuttings were incubated with solutions containing bacteria for different time duration (6,12,18 and 24 hrs). The entire process was maintained in the germ-free conditions with sterile soil and pots in the culture room. The primed ginger showed sprouting within six days, while the sprouting took more than 20 days for unprimed ones. All bacterial concentrations primed at 6 h and 12 h were rejected due to poor growth patterns. The selected concentration was 106 CFU for 24 hours, which showed the highest growth rate in terms of morphological attributes (shoot length 61 cm and leaf length 28 cm). Moreover, the plants also showed highest chlorophyll content in the leaves when compared to control and other priming treatments. In conclusion the bio-primed (10° CFU for 24 hours) plants showed an enhancement in germination, growth and photosynthetic pigment, hence this priming concentration and duration was suitable for the biopriming and crop improvement of ginger plants.

KEYWORDS: Biopriming, Ginger, Growth, Improvement, Pseudomonas.





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### Phytochemical and GC-MS/MS Analysis of Strophanthus wightianus Wall. ex Wight

Sabin P. Q.\* & Girija T. P.

Research & PG Dept. of Botany, MES Asmabi College, P. Vemballur, Kodungallur, Kerała.

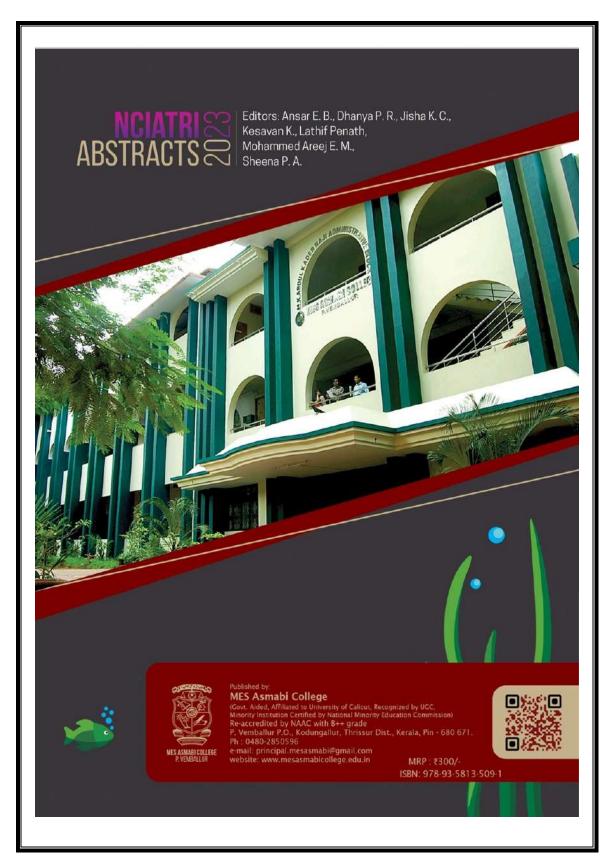
\*Corresponding author: sabinasmabi@gmail.com

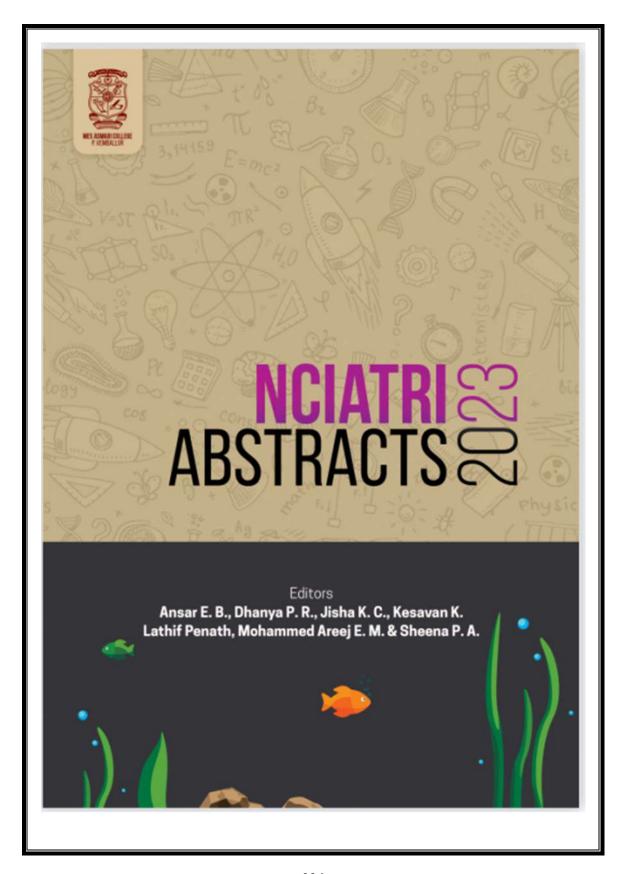
Background: Strophanthus wightianus Wall. ex Wight belongs to the family Apocynaceae and is well known for its medicinal properties. The present study was carried out to evaluate the Preliminary phytochemicals and possible bioactive components present in the methanolic extract of Strophanthus wightianus Wall. ex Wight stem and leaves.

Results: The phytochemical analysis of methanolic extract of Strophanthus wightianus Wall. ex Wightleaves revealed the presence of flavonoids, phenols, saponins, alkaloids, glycosides and terpenoids. The stem extract showed the presence of alkaloids, steroids, flavonoids, phenols, coumarins, glycosides, tannins and Terpenoids. The GC-MS/MS analysis carried out using methanolic leaf and stem extracts. It shows the presence of twenty-three bioactive compounds in leaf and twenty-nine compounds in stem. which include the main bioactive compounds like Paromomycin, Niacin, Methyleugenol, Iridomyrmecin, Apiol, phytol, Methyl nicotinate, Nicofuranose, 2, 4'-Bipyridine, Desaspidinol and Methyl stearate.

Conclusion: The phytochemical and GC-MS/MS analysis of methanolic extract of Strophanthus wightianus Wall. ex Wight leaves and stem revealed the presence of bioactive compounds with important medicinal properties. Hence, the presence of these phytochemicals could be responsible for the therapeutic effects of the plant.

**KEYWORDS:** Strophanthus wightianus Wall. ex Wight, Phytochemicals, GC-MS/MS, Bioactive Compounds.





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### Structural Properties and Antibacterial activity of Copper Oxide Nanoparticles

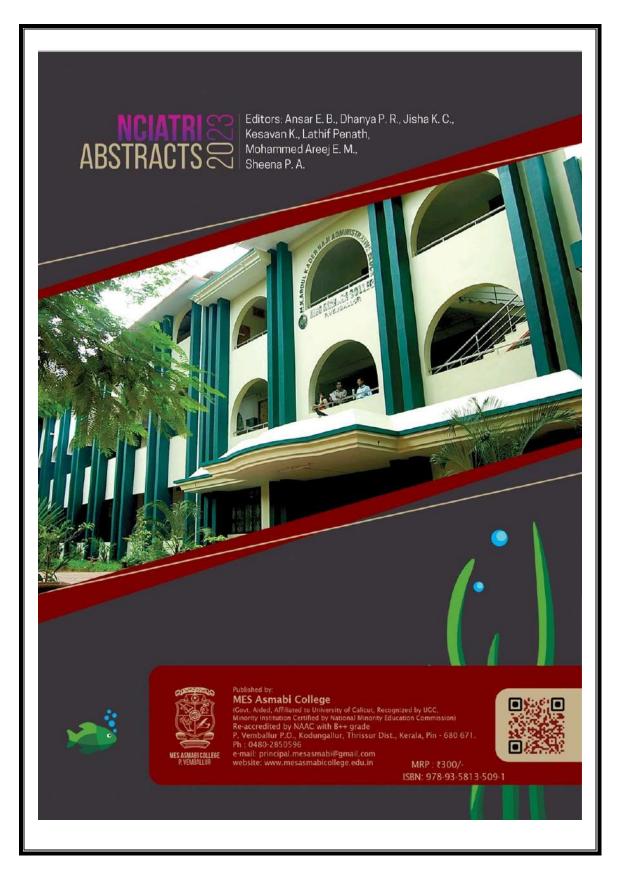
Chithra B. <sup>1</sup> & Sheeba N. H. <sup>2\*</sup>

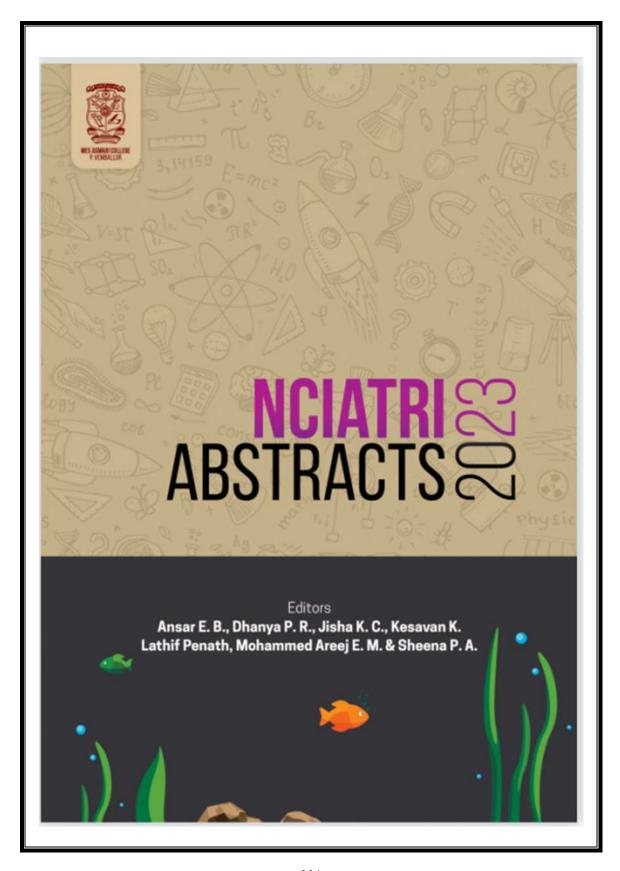
<sup>3</sup>MES Ponnani College Ponnani, Malapuram, Kerala.

<sup>2</sup>MES Asmabi College, P. Vemballur, Kodungallur, Kerala.

\*Corresponding author: sheebames.naser@gmail.com

Copper oxide (CuO) NPs have been synthesised by simple Co-precipitation method at different annealing temperature for Optimization. Samples are characterized using X-ray diffraction (XRD), Energy Dispersive X-ray Analysis (EDAX), Fourier transform infrared spectroscopy (FTIR), Scanning Electron microscopy (SEM) and UV-visible absorption spectroscopy (UV). Anti-bacterial activity of the optimized sample has been assessed using disc diffusion method. It is proven by structural analyses that CuO exists as a monoclinic structure in all samples. Annealing effects on purity of the sample and the particle size of the prepared CuO nanoparticles studied successfully. Using X-ray broadening, crystallite sizes and lattice strain on the peak broadening of CuO-NPs have been investigated using Williamson-Hall (W-H) analysis and the precise lattice parameter values calculated using the Nelson-Riley function. Monoclinic CuO nanostructures have been confirmed by FTIR measurements of all the samples, also elastic properties are studied. Chemical compositions are identified by EDAX spectra. Optical studies indicate that energy bandgap of as-prepared samples varies as 2.67 - 3.17 eV and absorbance peakas 240 nm - 257 nm. The antibacterial activity of the CuO nanomaterial is determined by using disc diffusion method against Gram positive and Gram-negative bacteria. Gramnegative bacterial strains show more sensitivity than gram-positive because of their membrane structure. The results show a strong decline of bacterial strains after a short contact with nanoparticles.





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Sl. No.	Title & Authors	Page No.
39	A Novel Approach to the Synthesis of White Light Emitting Dy <sup>3+</sup> Doped Lanthanum Oxalate Single Crystals Via Hydro Silica Gel Method Aryamol Stephen	39
40	The Impact of Deposition Time on the Structural and Optical Properties of Flower-like PbS Thin Films Ashitha T. M. & Sheeba N. H.*	40
41	Structural Properties and Antibacterial activity of Copper Oxide Nanoparticles $\it Chithra~B.~\&~Sheeba~N.~H.^*$	41
42	Anatase to Rutile Phase Transformation of $TiO_2$ Nanoparticles Hasna N. J., Anna Rose & Sheena P. A.*	42
43	Inhibiting Action of Cu Doping on the Phase Transformation of $TiO_2$ Nanoparticles Shanu A. S., Greatel Paremel & Johns Naduvath*	43
44	Investigation on Trivalent Neodymium Doped (Nd³+) Fluoroborosilicate Glasses for Laser Application.  Sreedevi	44
45	Parental Bonding and Perception of Success Among Late Adolescent Athletes Adnan Hamza Kizhisseri, Minna Farhana, Pranav Mohan, Rasha K. M.* & Minsila Hilal.	45
46	Suicidal Ideation and Academic Stress Among Grade X Students Following ICSE, State and CBSE Syllabi in Kerala: A Comparative Study Alna Elisubha V. S., Vismaya B., Mohammed Saif Zidan & Soumya Starlet C. T.	46
47	Academic Adaptability and Resilience Among College Students based on Learning Style  Ayisha A. P. & Latheef Paneth*	47
48	Effect of Aggression on School Refusal Behavior Among Adolescence Bhagya B. L. & Farhana Nazar*	48
49	Pain Appraisal, Catastrophizing, Fear of Progression and Death Anxiety Among Cancer Patients  Elsa Elsabeth Wilson & Soumya Starlet C. T.	49
50	Emotion Regulation, Coping Abilities and Cognitive Flexibility Among Service Oriented Youth Organisation Members and Non Members Farhana Nasar, Anaswara C. G., Afla K. S., Muhammed sharik, Sneha Rajeevan N. K.*	50
51	Perceived Social Support and Bullying Among Adolescents Fathimath Hiba* & Farhana Nasar K.	51
52	Relationship Between Expectationism and Self Care Behaviour Among Young Adults  Hareesh Mohan E. R. & Lathif Penath*	52

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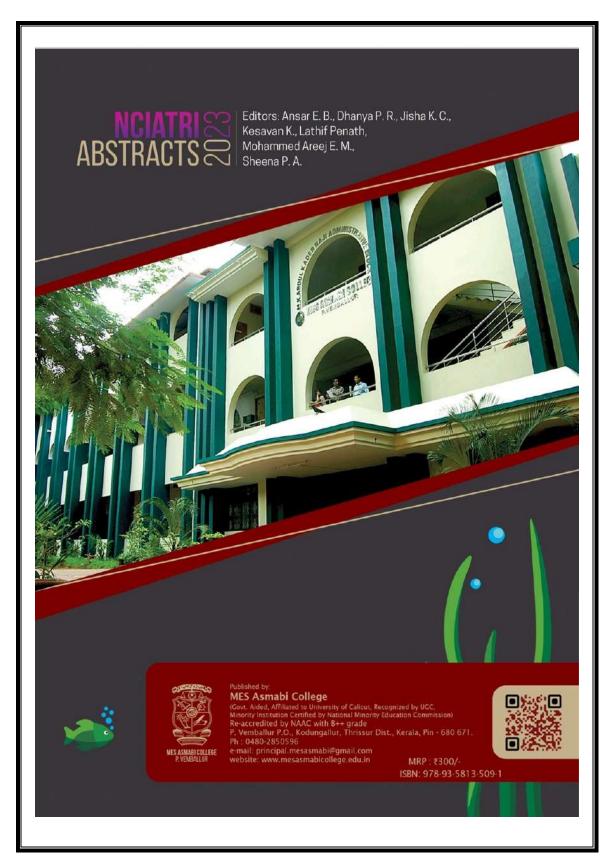
# The Impact of Deposition Time on the Structural and Optical Properties of Flower-like PbS Thin Films

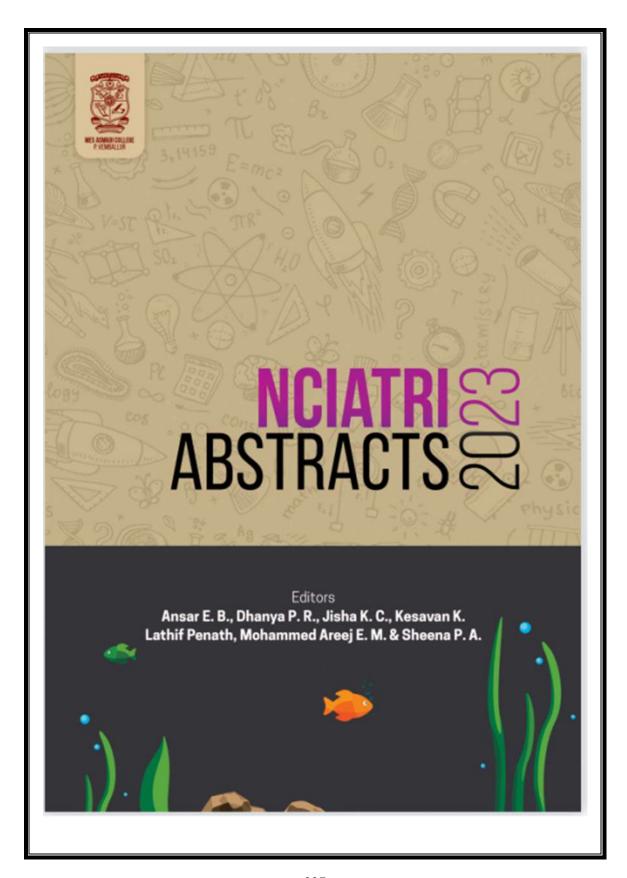
Ashitha T. M. & Sheeba N. H.\*

Dept of Physics, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.

\*Corresponding author: sheebames.naser@gmail.com

Polycrystalline PbS thin films are deposited onto Flint glass substrates by the method of chemical bath deposition (CBD) at different duration of deposition time. The structure and surface morphology of the films are characterized by X-ray diffraction (XRD) and field effect scanning electron microscopy (FE-SEM). XRD pattern exhibits polycrystalline structure with preferential orientation along (200) direction, parameters such as crystallite size, lattice constant, lattice-strain and dislocation density are calculated. The FE-SEM images show appearance of flower like structure on formation of PbS films which is indicative of suitability in gas sensing applications. Studies on optical properties carried out by UV-Vis spectroscopy measurements show bandgap in the range 1.65eV-1.41 eV. The photoluminescence spectra of the films exhibit two peaks centered at around 613 nm and 738 nm after excitation at 450 nm.





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41	Structural Properties and Antibacterial activity of Copper Oxide Nanoparticles Chithra B. & Sheeba N. H.*	41
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43	Inhibiting Action of Cu Doping on the Phase Transformation of TiO <sub>2</sub> Nanoparticles Shanu A. S., Greatel Paremel & Johns Naduvath*	43
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### Anatase to Rutile Phase Transformation of TiO, Nanoparticles

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<sup>1</sup>Dept. of Physics, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.

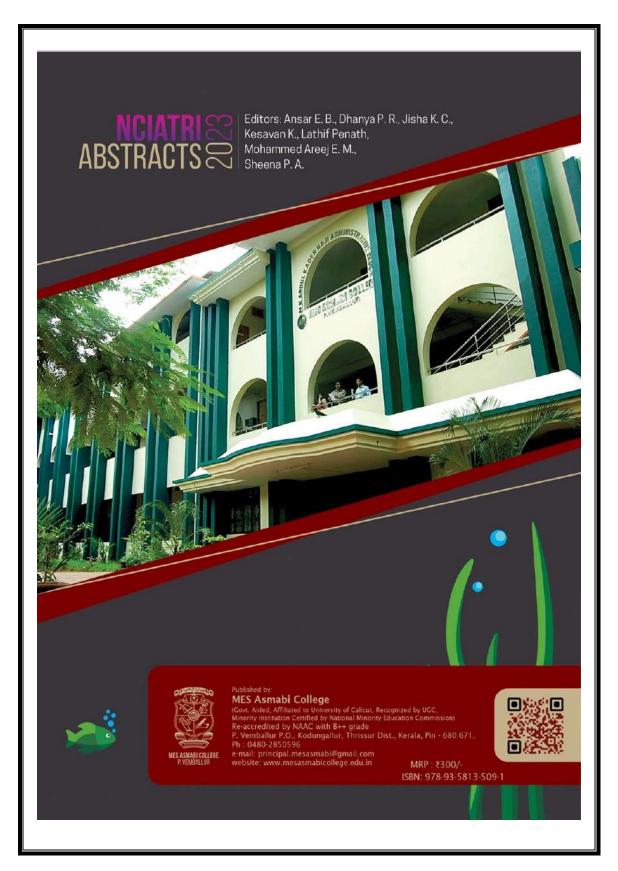
<sup>2</sup>Dept. of Physics, St Aloysius College, Elthuruth - Thrissur, Kerala.

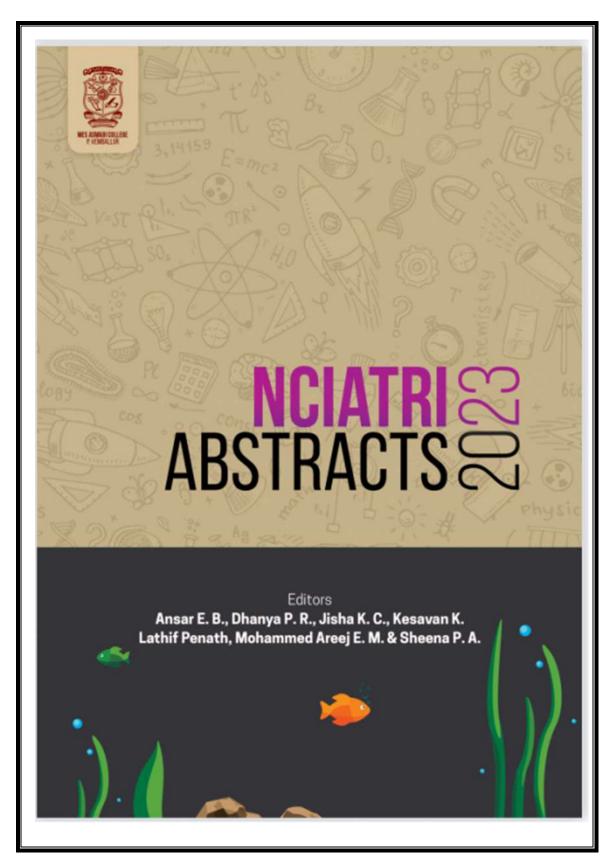
\*Corresponding author: sheenakasim@gmail.com

The anatase to rutile phase transformation of Titanium dioxide nanoparticles upon calcination is reported here. TiO, nanoparticles are synthesized by sol gel method using titanium (IV)-n - butoxide (Ti(OC,H,), or Ti(OBu),), isopropyl alcohol ((CH,),CHOH) and conc. HNO<sub>a</sub>. The thermal stability and the decomposition of synthesized materials are studied using thermogravimetric (TG) analysis. The TGA studies show no weight loss for the sample after 400°C. Hence the as prepared samples are calcined at 400 and 800°C for three hours The structural characterization of the nanoparticles is done using X-ray diffraction (XRD) technique. The XRD patterns indicate that the structure of TiO, is anatase at a calcination temperature of 400°C and rutile at 800°C. The X-ray diffraction studies show an increase in the intensity of diffraction peaks, decrease in FWHM and increase in crystallite size. The crystallite size values obtained are 11.3 and 58 nm for the anatase and rutile samples respectively. The optical absorption of these nanoparticles are investigated using UV-Visible and photoluminescence (PL) spectroscopic methods. The optical absorption spectra of TiO, sample exhibited strong absorption in the UV region. The band gap energy values obtained are 3.43 and 3.00 eV for the anatase and rutile samples respectively, in close agreement with the values obtained in other studies. The samples exhibit a strong and wide PL signal from 400 to 500 nm and a shoulder peak at 377 nm with an excited wavelength of 300 nm. Both the samples exhibit similar type of PL signal with no significant change in the curve shape. The emission intensity of anatse is higher than that of rutile sample.

This study reports the successful transformation from anatase to rutile phase of TiO<sub>2</sub> nanoparticles synthesized by sol gel method.

**KEYWORDS:** TiO2 Nanoparticles, Anatase & Rutile Phase, Sol-gel Technique, Phase Transformation.





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# Parental Bonding and Perception of Success Among Late Adolescent Athletes

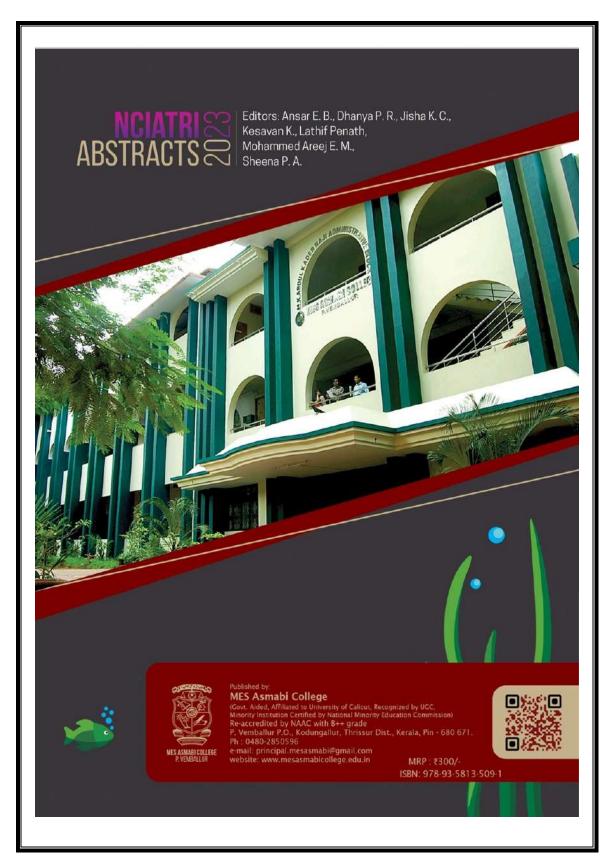
Adnan Hamza Kizhisseri, Minna Farhana, Pranav Mohan, Rasha K. M.\* & Minsila Hilal.

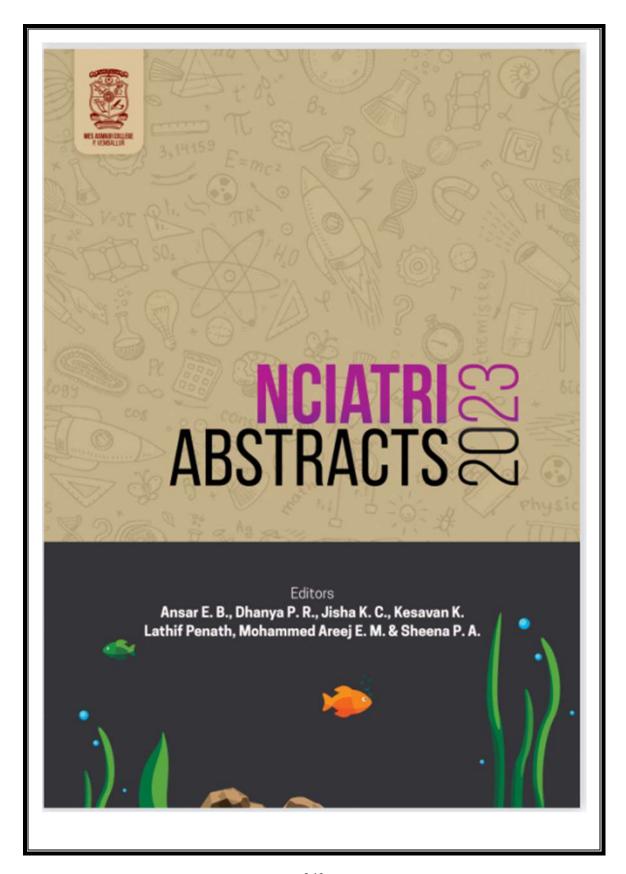
Dept. of Psychology, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.

\*Corresponding author: raminrasha8@gmail.com

The aim of the study is to examine the relationship between parental bonding and perceived success among late adolescents partaking in sports or other physical activities. The difference in parental bonds and perception of success is also measured between the two genders. 63 male and 63 female students playing competitive sports participated in this study. The data used in the study was collected using the Parental Bond Instrument (PBI, Gordon Parker, Hilary Tupling, &L.B Brown) and the Perception of Success Questionnaire (POSQ, Adult Version) through online survey. The collected data was analysed using Independent sample T test and correlation was found using Pearson Correlation. The results showed that there was no significant relationship between Parental Bonding and Perceived Success among late adolescent athletes. However, there was a significant difference between males and females in Parental Bonding with females showing a higher level of parental bonding with parents. Having a better bond with parents does not affect perceived success among young athletes. This may be because young adults spent much more time with peers and other same aged people.

KEYWORDS: Perception of Success, Parental Bonding, Adolescent Athlete.





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# Impact of Birth order on Academic Procrastination Among Young Adults

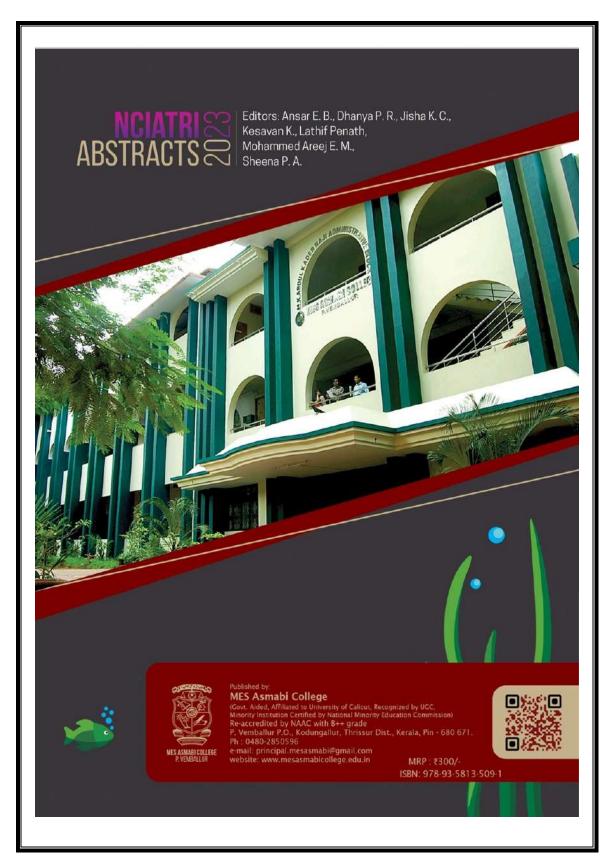
Minsila Hilal, Haripriya M. T., Rameesa Parvin K. U. & Rafna Rafi Femina V. A.\*

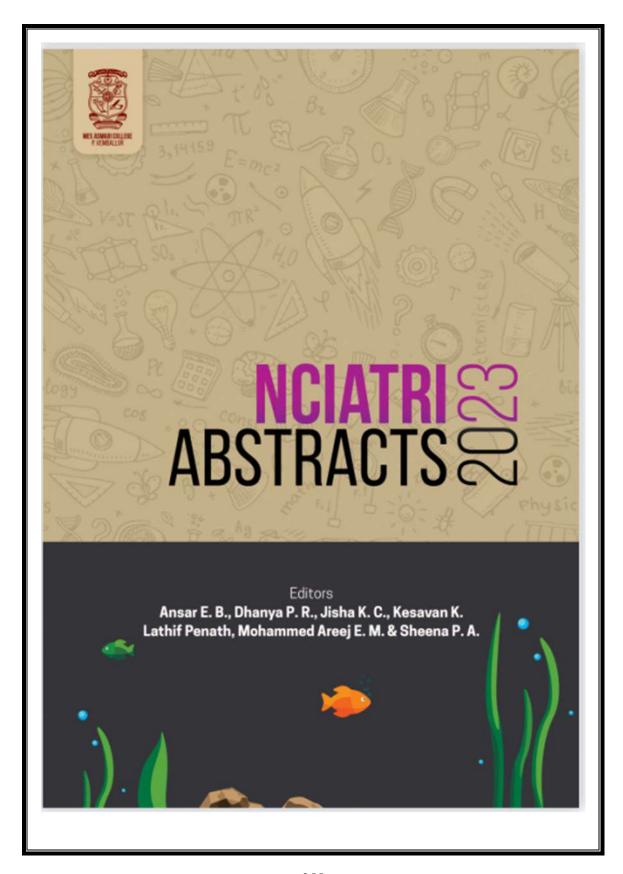
Dept. of Psychology, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.

\*Corresponding author: feminamanaf013@gmail.com

Academic Procrastination is one among the major challenges faced by students today. Academic procrastination can be understood as knowing that one is supposed to and perhaps even wanting to, complete an academic task but failing to perform the activity within the expected or desired time frame. Procrastination has been most thoroughly studied in student populations where it has been associated with increased levels of stress, depression, anxiety and poor academic performance but also with putting of everyday obligations. Birth order can be stated as the chronological order of sibling births in a family. Several studies found birth order to be associated with many of the personality traits. The Academic Procrastination is one among the major challenges faced by students today. Academic procrastination can be understood as knowing that one is supposed to and perhaps even wanting to, complete an academic task but failing to perform the activity within the expected or desired time frame. Procrastination has been most thoroughly studied in student populations where it has been associated with increased levels of stress, depression, anxiety and poor academic performance but also with putting of everyday obligations. Birth order can be stated as the chronological order of sibling births in a family. Several studies found birth order to be associated with many of the personality traits. The main objective of the study was to find out whether the birth order is linked to traits such as procrastination. The study sought to understand the level of procrastination among students and to find out whether there is any difference in procrastination among firstborn, middle-born and last born. This is a quantitative crosssectional study and the samples were drawn using the quota sampling technique. A total of 150 participants took part in the study with 50 belonging to first born 50 to middle bom and 50 to last born. Data was collected using the 20-question version of Lay's Procrastination scale. The data is analysed using statistical package for the social sciences. The scores are analysed using one way ANOVA. There was no significant relationship between birth order and procrastination, but there was increase in procrastination in middle borns when compared to first born and last born.

KEYWORDS: Birth Order, Procrastination.





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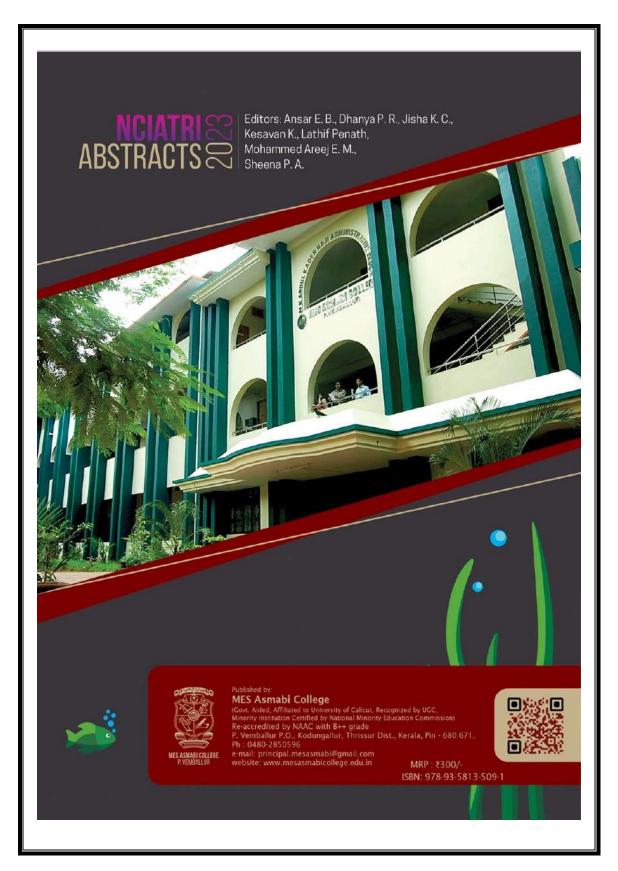
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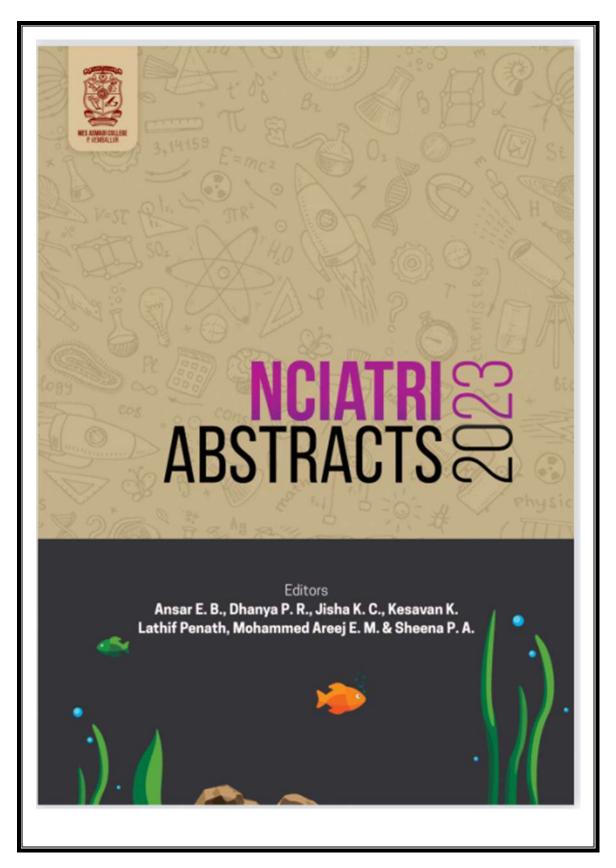
#### **Bullying and Resilience Among Adolescent**

Muhammed Shahal T.\* & Minsila Hilal
Dept. of Psychology, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.
\*Corresponding author: shahalt6@gmail.com

The aim of the study is to evaluate the relationship between bullying and resilience among adolescents in Thrissur district. It was a descriptive quantitative research design. Sample of 120 adolescents aged 13-18 years were recruited in Thrissur district, 60 boys and 60 girls participate in this study. Data was collected using Child adolescent bullying scale CABS (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014) and Bharathiar university resilience scale BURS (Prof Dr. Annalakshmi Narayanan, 2009) through field survey. The statistical significance of differences between genders was tested using t -test. Correlation was conducted to explore the relationship between bullying and resilience. The relationship was observed for all participant is that there is no significant relationship between bullying and resilience in adolescents, There was no significant difference between bullying and resilience among adolescent boys and girls. There for, resilience important for preventing bullying.

KEYWORDS: Bullying, Resilience, Adolescent.





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### Perceived Stress and Pornography Use Among Young Adults

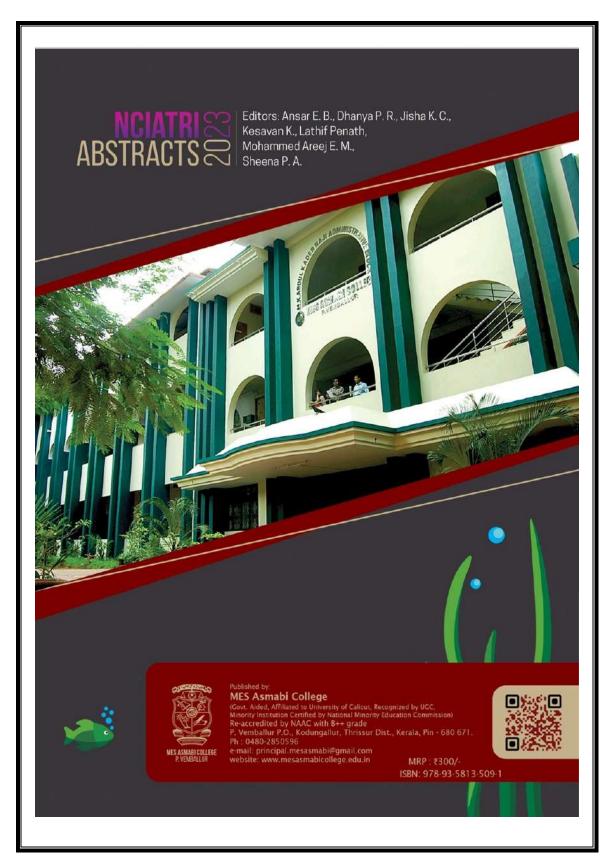
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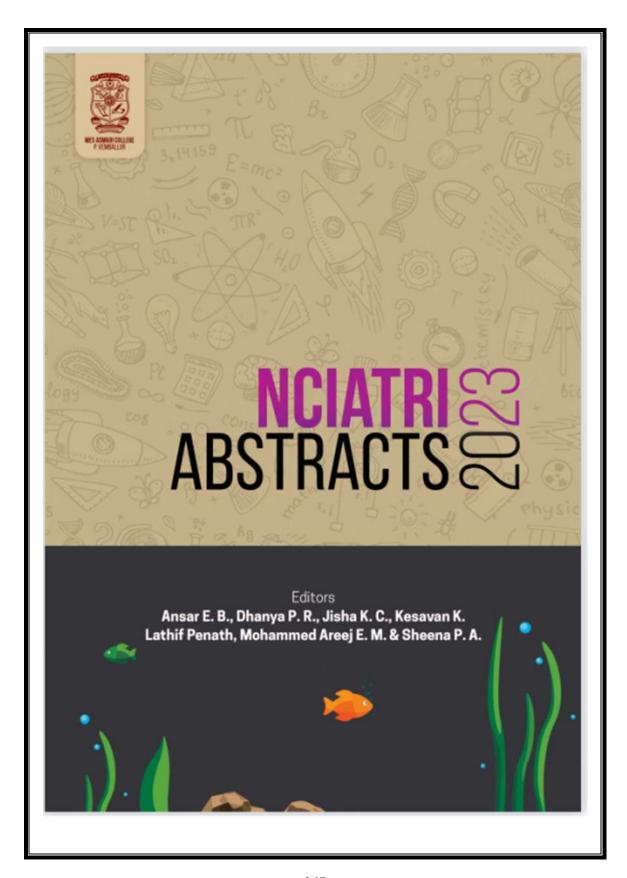
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Perceived stress and porn addiction are common issues among college students. Studies suggest that pornography use is related to lower mental well-being among young adults. The main aim of the study is to understand what relationship is sharing between perceived stress and pornography use among young adults and to assess whether there is a difference in male and female between perceived stress and pornography use. Perceived stress refers to the degree to which events in a person's life are assessed as stressful, unpredictable and uncontrollable (Cohen, Kamarck, & Mermelstein, 1983; Phillips, 2012). This is a descriptive quantitative study and convenient sampling method were used. 61 male and 61 female individuals participated in the study. Data were collected using the 10-question version of Perceived Stress Scale (pss-10), Pornography Assessing Screening Tool (past) and socio-demographic questionnaire (created for this study). Independent sample t test and Pearson correlation coefficient were used to analyse the data. Males and females showed no difference in perceived stress, while they showed significant difference in Pornography use.

KEYWORDS: Perceived Stress, Pornography Use, Young Adults.





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50	Emotion Regulation, Coping Abilities and Cognitive Flexibility Among Service Oriented Youth Organisation Members and Non Members Farhana Nasar, Anaswara C. G., Afla K. S., Muhammed sharik, Sneha Rajeevan N. K.*	50
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### Academic Adaptability and Resilience Among College Students based on Learning Style

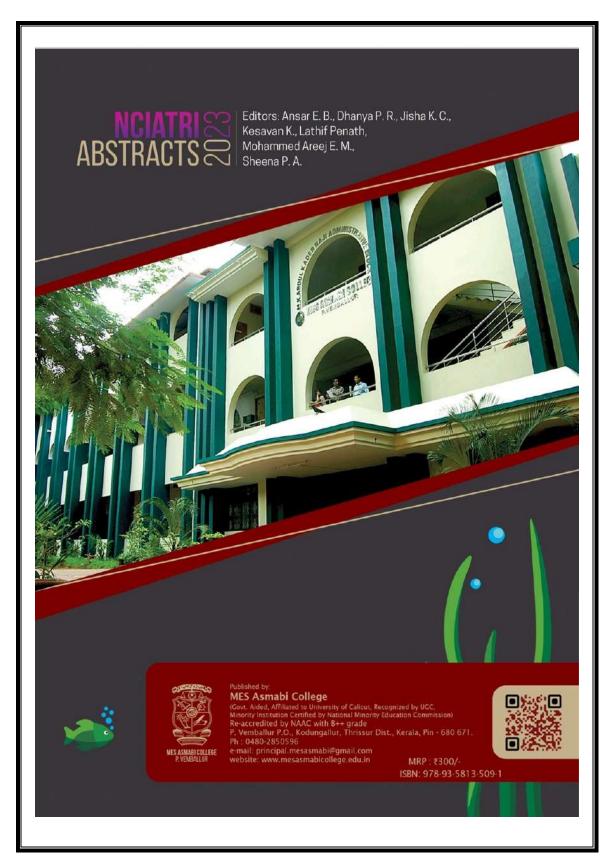
Ayisha A. P. & Latheef Paneth\*

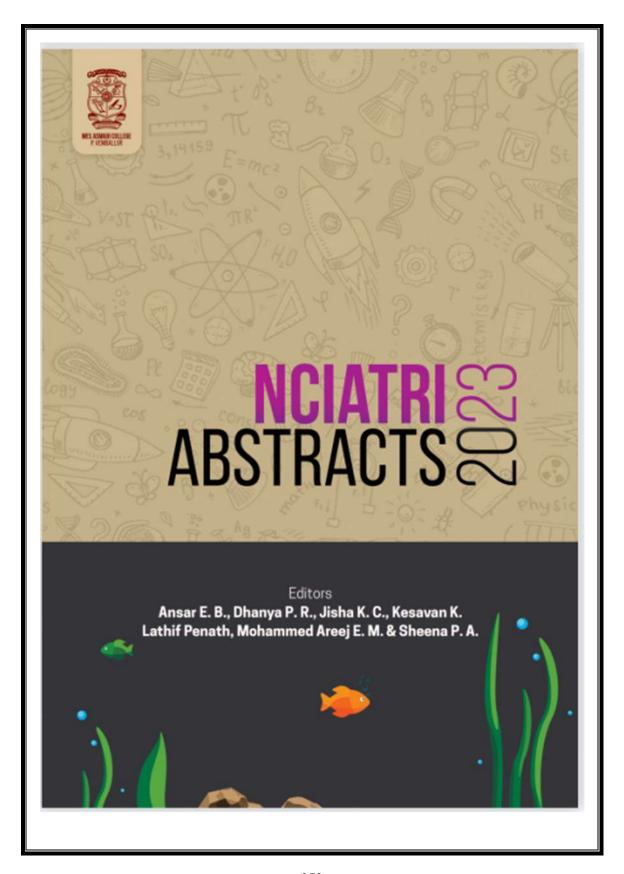
Dept. of Psychology, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.

\*Corresponding author: lathifpenathpsy@gmail.com

The aim of this study is to examine the difference between academic adaptability and resilience among college students based on their learning style, and the dependence of academic adaptability and resilience on learning style. 60 visual learners and 60 auditory learners aged between 18 to 25 from the college students participated in this study. The data collected using Academic adaptation scale(Wu, Fan & WEIHUA - 2017), Bharathiar university resilience scale BURS ( Prof Dr. Annalakshmi Narayanan, M.A, PhD, JDS(ISI), Professor department of psychology, Bharathiar University Coimbatore) And learning style questionnaire(O'Brien - 1985) along with a self made data schedule through online survey. Data was collected according to stratified sampling technique. The collected data were analyzed using SPSS statistical tools and appropriate statistical techniques such as descriptive statistics and independent t-test. The major finding shows such as the visual learners have more academic adaptability and resilience comparatively to the auditory learners, there is significance in academic adaptability and resilience among college students based on learning style, And there is a significant correlation between academic adaptability and resilience.

KEYWORDS: Academic Adaptation, Resilience, Learning Style.





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### Relationship Between Expectationism and Self Care Behaviour Among Young Adults

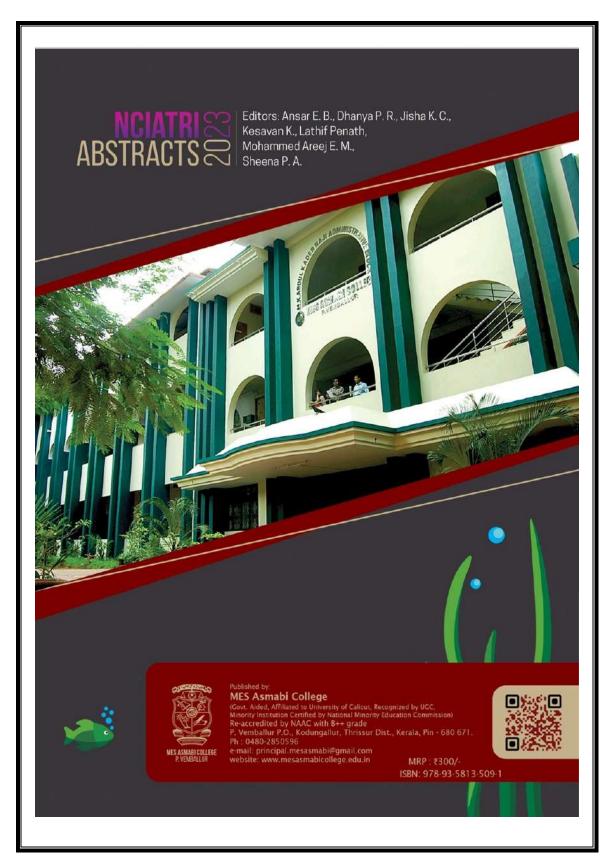
Hareesh Mohan E. R. & Lathif Penath\*

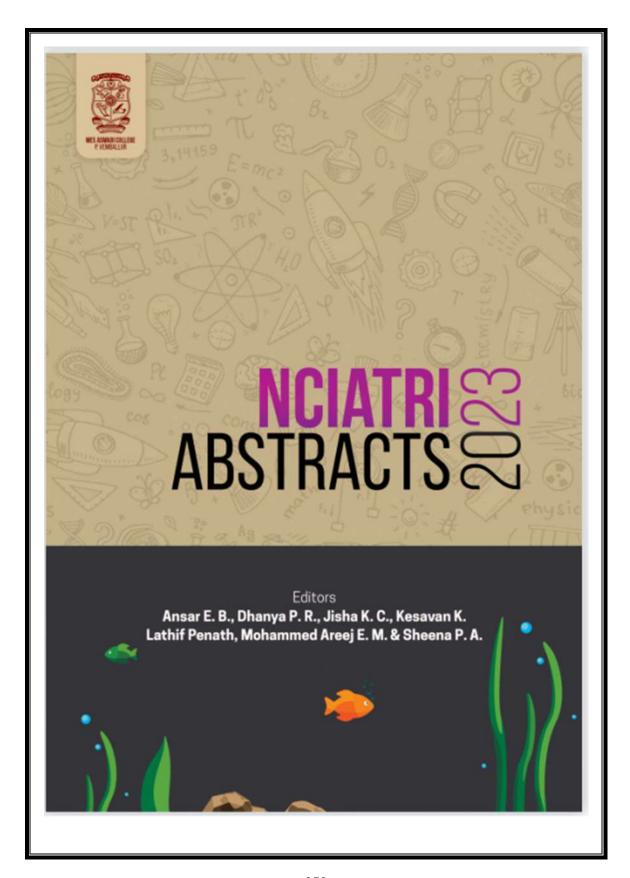
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The attitude of young adults towards the present time and future may influence in their self care behaviors. The purpose of this study is to analyze the relationship between Expectationism and Self-Care Behaviors in young adults. The study was conducted among a sample of 165 adults from the population in kodungalloor locality in thrissur district of state kerala through a online survey. This is a correlational study and convenient sampling method was used. Time Horizon Questionnaire (Gerald J.S Wilde, 2001), B-Mindful Self-Care Scale (Hotchkiss JT, Cook-Cottone CP, 2019) - short version were the two tools used to measure expectationism and self care behavior respectively. The collected data was analyzed using SPSS statistical tool and the appropriate statistical technique was pearson's correlation coefficient. This study does not include participants who are below 18 years of age and above 25 years of age. The results showed no significant relationship between Expectationism and Self Care Behaviour among young adults. Increasing perceived value of future over the present among young adults does not play as a key factor in promoting their self care behaviors.

KEYWORDS: Expectationism, Self Care Behaviour, Young Adults.





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60	Psychological Well Being and Social Avoidance and Distress Among Theist and Atheist Rizwana M. A., Alfiya N. R., Sandra N. S., Abdul Salam & Farhana Nasar*	60
61	Gender Role Beliefs and Academic Self-efficacy Among College Students in Numerically Female Dominated Education Streams Sethulakshmi K. S. & Lathif Penath*	61
62	Perceived Stress and Pornography Use Among Young Adults Vijay Viond K. & Minzila Hilal*	62
63	Social Skills Training for Long Stay Psychiatric Patients Diagnosed with Schizophrenia: Effects and Implications Vishnu Digambhar & Ranjeet Kumar	63
64	Observation of Food and Feeding Behaviour of Nilgiri Langur (Semnopithecus johnii) in Nilgiri Forest Division, Tamil Nadu, Southern India Jayaraman Ranjitha, Balasundaram Ramakrishnan & Selvaraju Raja	64
65	A Study of Behavioural Patterns and Effect of Starvation on Fight Success in the Common House Cricket Acheta Domesticus  Jyothi V. & Bhavana C. B.	65

## The Effect of Learning Styles on Academic Adaptation of High School Students

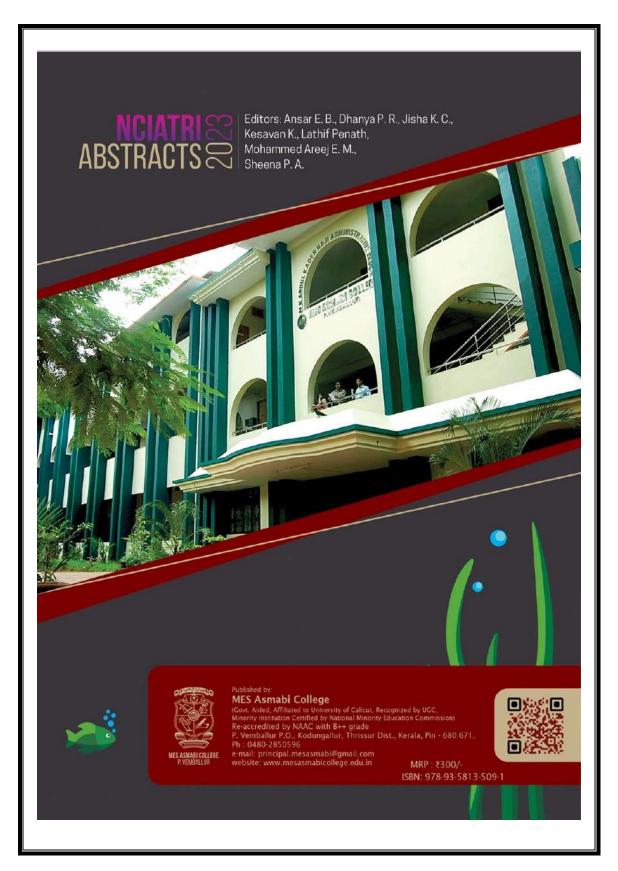
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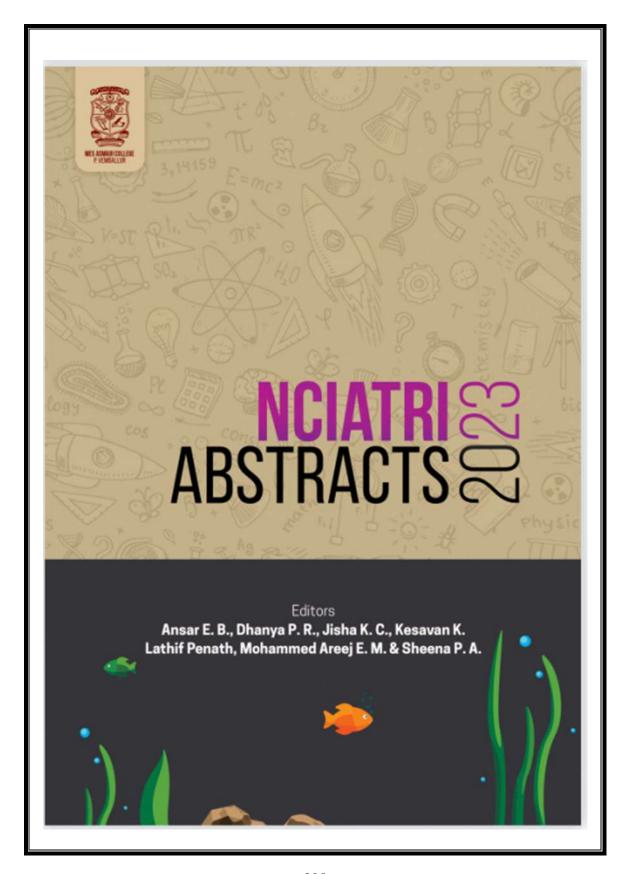
Dept. of Psychology, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.

\*Corresponding author: lathifpenathpsy@gmail.com

The present study examines the relationship between psychological wellbeing and social avoidance &distress among theist and atheist and to assess whether there is any difference between these variables among theist and atheist. Psychological well-being is a complex construct that concerns optimal psychological functioning and experience. It may be defined as including hedonic (enjoyment, pleasure) and eudaimonic (meaning, fulfilment). Psychological well-being scale consists of self-acceptance, positive relationships with others, autonomy, environmental mastery, a feeling of purpose and meaning in life, and personal growth and development. Social avoidance is defined as the desire to escape or actually avoiding being with, talking to, or interacting with others for any reason. The total sample is 104. The sample were collected from 52 theist and 52 atheist aged 18 to 40. The psychological wellbeing scale and SADS (social avoidance and distress) were used in this study. Data were collected according to stratified sampling technique. The collected data was analysed using SPSS statistical tool and appropriate statistical technique such as descriptive statistics, correlation and independent t test were used. The major finding of this study was there is a significant negative correlation with the above mentioned two variables among these samples and Theist and atheist showed no significant difference in psychological wellbeing and social avoidance & distress.

KEYWORDS: Learning Style, Academic Adaptation, Learning Style Questionnaire.





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## Gender Role Beliefs and Academic Self-efficacy Among College Students in Numerically Female Dominated Education Streams

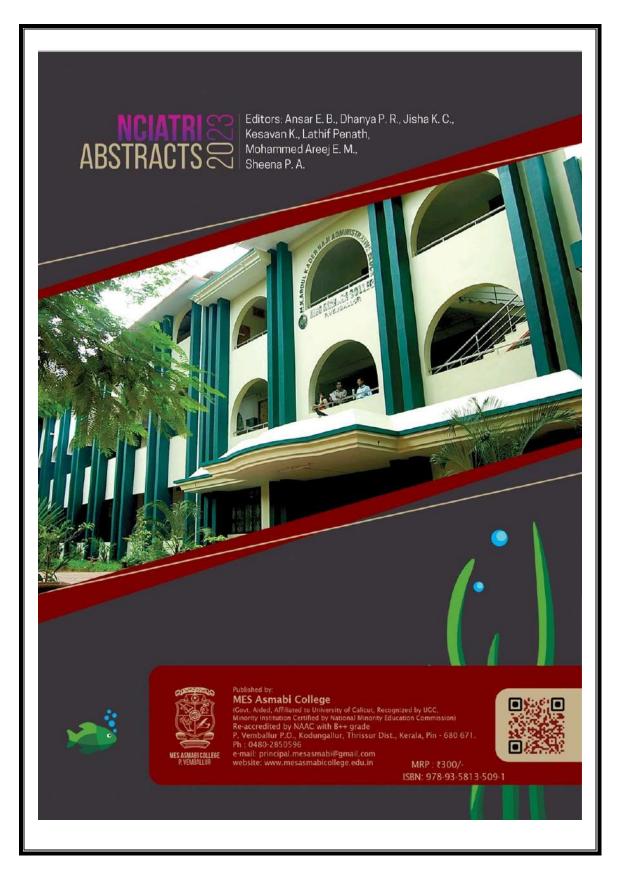
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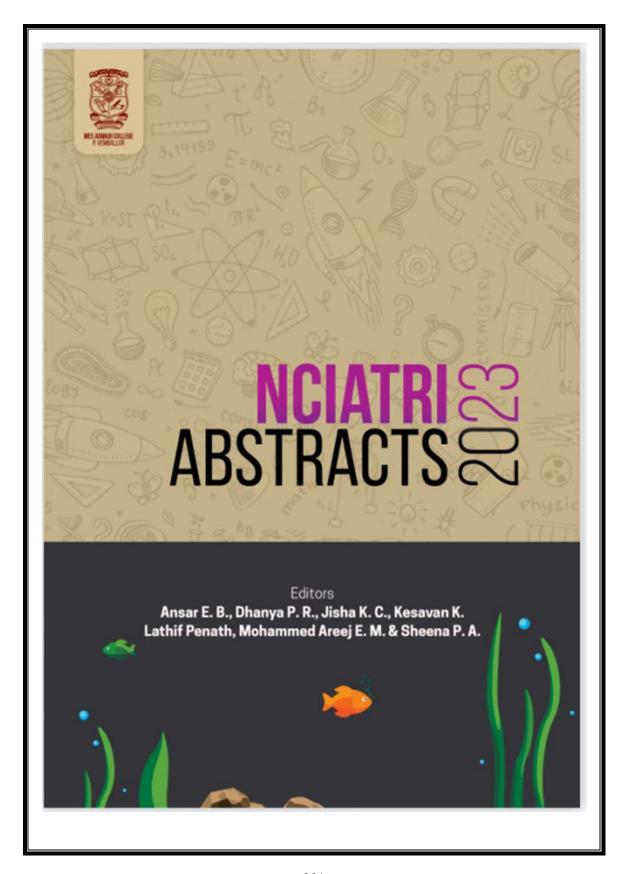
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The aim of the study is to examine the differences in gender role beliefs and a cademic self-efficacy among students college students in numerically female dominated education streams and make within-gender comparisons across these contexts.62 male and 66 female students from various numerically female dominated education streams participated in this study. Data was collected using Attitudes Towards Women Scale (Spence, Helmrich & Stapp, 1978) - Short version and Academic Self-Efficacy Scale (Abdul Gafoor K. & P. Muhammed Ashraf, 2006) along with a self-made personal data schedule through online survey. Data was collected according to stratified sampling technique. The collected data were analysed using SPSS statistical tool and appropriate statistical techniques such as descriptive statistics and independent t-test. The major finding showed that there is significant differece in gender role beliefs and academic selfefficacy among male and female students in numerically female dominated educated streams. Female students of numerically female dominated education streams did not exhibit traditional attitudes toward women compared to male students and also Male students of numerically female dominated education streams showed lower academic self-efficacy than female students.

**KEYWORDS:** Gender Role Beliefs, Attitude Towards Women, Academic Self-efficacy and Gender.





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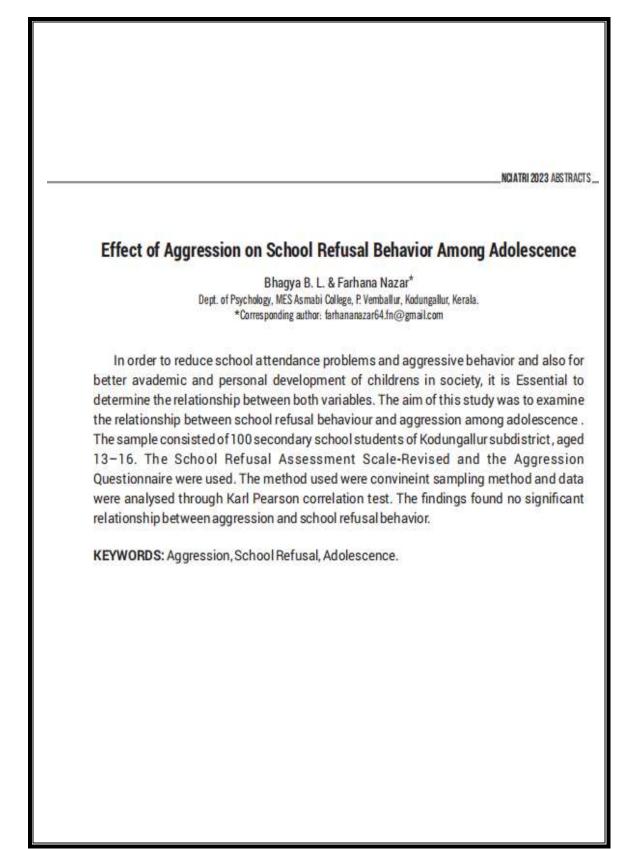
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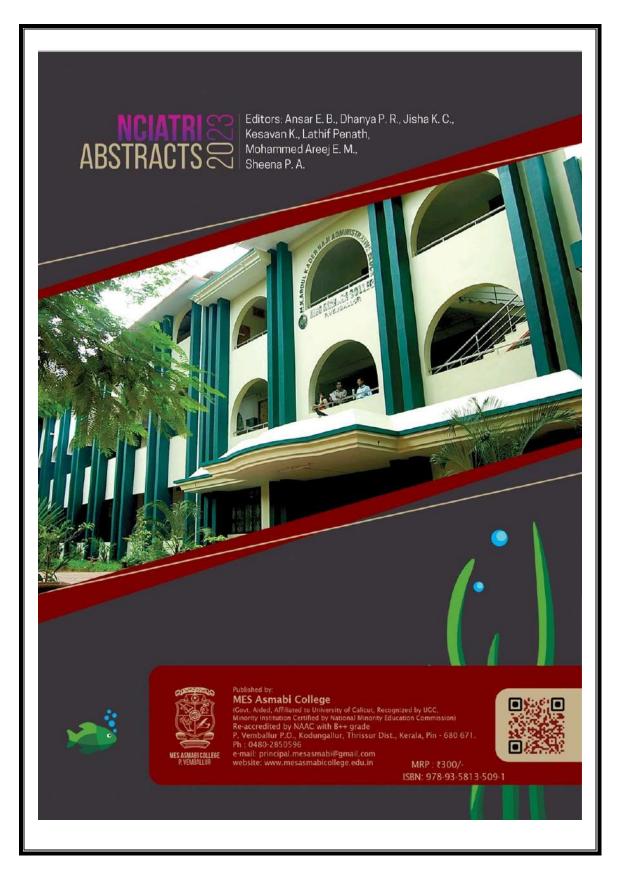
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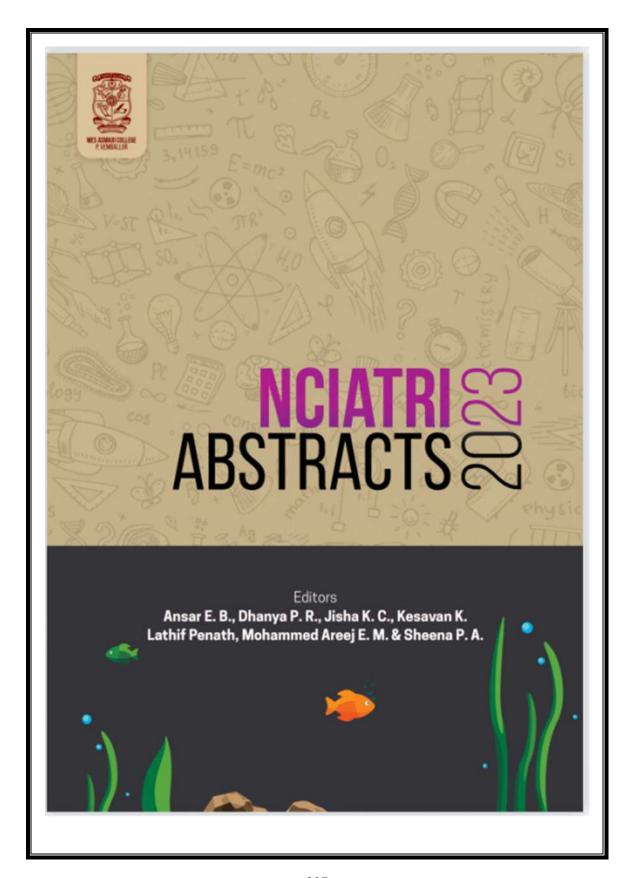
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### Emotion Regulation, Coping Abilities and Cognitive Flexibility Among Service Oriented Youth Organisation Members and Non Members

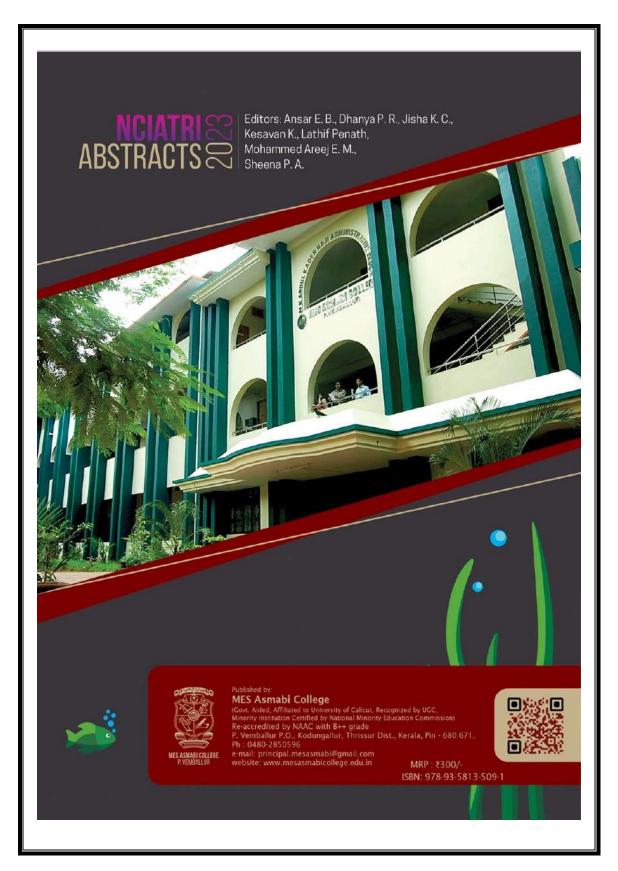
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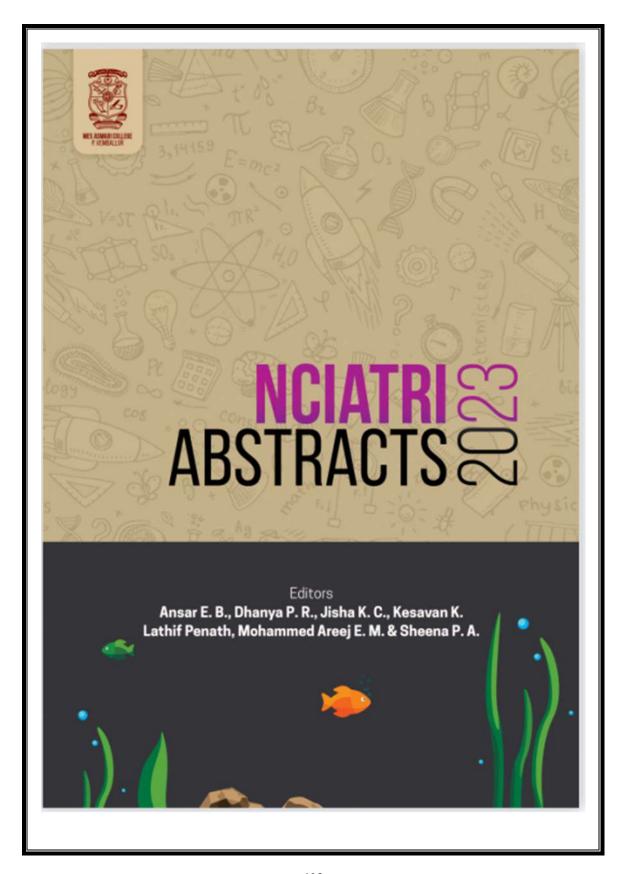
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The present study aims to assess the difference in emotion regulation, coping ability and cognitive flexibility of members of official service-oriented youth organisations from that of non-members. Emotion regulation is the ability to accept control over one's own emotional state. It may involve behaviours. Such as rethinking a challenging situation to reduce anger and anxiety, hiding visible signs of sadness or fear or focusing on reasons to feel happy or calm. Coping abilities are the methods a person uses to deal with stressful situations. This may help a person to face a situation, take action, and be flexible and persistent in solving problems. Cognitive flexibility is the readiness with which one can selectively switch between mental processes to Generate appropriate behavioural responses. A total sample of 200 emerging adults (18-22) were taken. The samples were divided into 100 members of the service-oriented group and 100 non-members. Emotion regulation questionnaire (ERQ). Coping scale and Cognitive flexibility inventory (CFI) were used as measures of study along with a self-made personal data schedule which includes name, age, gender, qualification, whether members of an official youth organization or not were collected without any other details. Data was collected according to cluster sampling technique. The collected data was analysed using SPSS statistical tools and appropriate statistical techniques such as descriptive statistics and independent T test were used. The major findings of the study include that there is no significant difference between emotion regulation coping ability and cognitive flexibility of members and nonmembers of official service-oriented youth organizations.

**KEYWORDS:** Emotion Regulation, Coping Ability, Cognitive Flexibility, Youth Organisation Members, Non-members.





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Contents

Sl. No.	Title & Authors	Page No.
39	A Novel Approach to the Synthesis of White Light Emitting Dy³* Doped Lanthanum Oxalate Single Crystals Via Hydro Silica Gel Method Aryamol Stephen	39
40	The Impact of Deposition Time on the Structural and Optical Properties of Flower-like PbS Thin Films Ashitha T. M. & Sheeba N. H.*	40
41	Structural Properties and Antibacterial activity of Copper Oxide Nanoparticles Chithra B. & Sheeba N. H.*	41
42	Anatase to Rutile Phase Transformation of TiO $_2$ Nanoparticles $\it Hasna~N.~J_*,~Anna~Rose~\&~Sheena~P.~A.*$	42
43	Inhibiting Action of Cu Doping on the Phase Transformation of ${\rm TiO_2}$ Nanoparticles Shanu A. S., Greatel Paremel & Johns Naduvath*	43
44	Investigation on Trivalent Neodymium Doped ( $\mathrm{Nd}^{3+}$ ) Fluoroborosilicate Glasses for Laser Application. Sreedevi	44
45	Parental Bonding and Perception of Success Among Late Adolescent Athletes Adnan Hamza Kizhisseri, Minna Farhana, Pranav Mohan, Rasha K. M.* & Minsila Hilal.	45
46	Suicidal Ideation and Academic Stress Among Grade X Students Following ICSE, State and CBSE Syllabi in Kerala: A Comparative Study  Alna Elisubha V. S., Vismaya B., Mohammed Saif Zidan & Soumya Starlet C. T.	46
47	Academic Adaptability and Resilience Among College Students based on Learning Style Ayisha A. P. & Latheef Paneth*	47
48	Effect of Aggression on School Refusal Behavior Among Adolescence Bhagya B. L. & Farhana Nazar*	48
49	Pain Appraisal, Catastrophizing, Fear of Progression and Death Anxiety Among Cancer Patients  Elsa Elsabeth Wilson & Soumya Starlet C. T.	49
50	Emotion Regulation, Coping Abilities and Cognitive Flexibility Among Service Oriented Youth Organisation Members and Non Members Farhana Nasar, Anaswara C. G., Afla K. S., Muhammed sharik, Sneha Rajeevan N. K.*	50
51	Perceived Social Support and Bullying Among Adolescents Fathimath Hiba* & Farhana Nasar K.	51
52	Relationship Between Expectationism and Self Care Behaviour Among Young Adults  Hareesh Mohan E. R. & Lathif Penath*	52

### Perceived Social Support and Bullying Among Adolescents

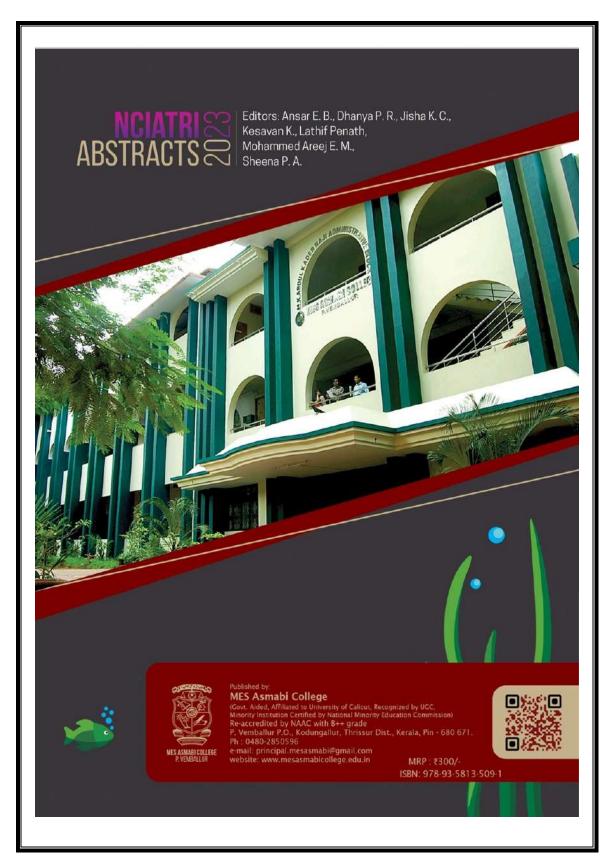
Fathimath Hiba\* & Farhana Nasar K.

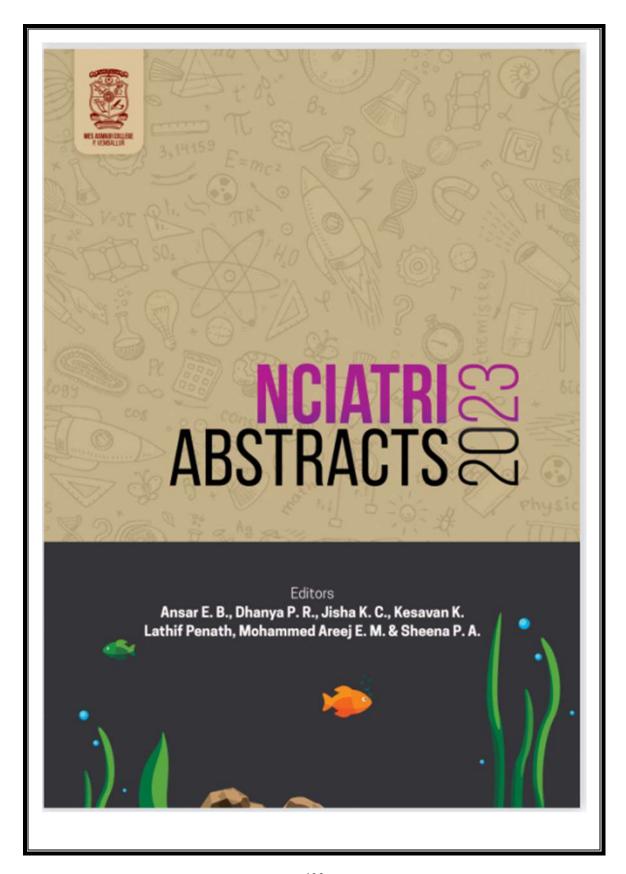
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\*Corresponding author: hibaabi952@gmail.com

Perceived social support can have a significant impact on bullying, both in terms of the likelihood of being bullied and the effects of being bullied. Perceived social support refers to an individual's perception of the availability of support from others, including family, friends, teachers, and other community members. The purpose of this study is to analyse the influence of perceived social support from family, friends and others among bullied students. This study was conducted among 160 adolescent students aged between. 12-18 years. The required data was collected using Child Adolescent Bullying Scale (CABS) and Multidimensional Scale for Perceived Social Support (MSPSS). Convenient sampling method was used and the data were analysed through Karl Pearson Correlation test. The result shows that there is negative correlation between bullying and perceived social support from family, friends and others among adolescents. And perceived social support is an important factor to consider when addressing and preventing bullying. Building strong support networks and fostering a sense of community can help reduce the incidence of bullying and mitigate its negative effects on individuals who do experience it.

KEYWORDS: Perceived Social Support, Bullying, Adolescents.





# NCIATRIS ABSTRACTS

### Editors:

Ansar E. B., Dhanya P. R., Jisha K. C., Kesavan K., Lathif Penath, Mohammed Areej E. M. & Sheena P. A.



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.

### Contents

Sl. No.	Title & Authors	Page No.
53	Father's Involvement in Development of Emotional Maturity and Resilience Among Young Adult Males  Haritha Hari & Anna Pheenix T. S.	53
54	Behavior Problems of Adolescents in Relation To Family Function and School Environment  Jisha P. K. & Nice Mary Francis P.	54
55	Quality of Life and Anxiety Among Yoga and Non Yoga Practictioners Jophiya P. J. & Sangeetha P. S.	55
56	The Effect of Learning Styles on Academic Adaptation of High School Students Kibilath Divan, Avani K. Devadas, Nijayas Prasad, Sreyakrishna T. J. & Lathif Penath*	56
57	Impact of Birth order on Academic Procrastination Among Young Adults Minsila Hilal, Haripriya M. T., Rameesa Parvin K. U. & Rafna Rafi Femina V. A.*	57
58	Bullying and Resilience Among Adolescent  Muhammed Shahal T* & Minsila Hilal	58
59	Study Habit and Academic Performance Among Higher Secondary Students Nimitha Premlal & Sangeetha P. S.	59
60	Psychological Well Being and Social Avoidance and Distress Among Theist and Atheist Rizwana M. A., Alfiya N. R., Sandra N. S., Abdul Salam & Farhana Nasar*	60
61	Gender Role Beliefs and Academic Self-efficacy Among College Students in Numerically Female Dominated Education Streams Sethulakshmi K. S. & Lathif Penath*	61
62	Perceived Stress and Pornography Use Among Young Adults Vijay Viond K. & Minzila Hilal*	62
63	Social Skills Training for Long Stay Psychiatric Patients Diagnosed with Schizophrenia: Effects and Implications Vishnu Digambhar & Ranjeet Kumar	63
64	Observation of Food and Feeding Behaviour of Nilgiri Langur (Semnopithecus johnii) in Nilgiri Forest Division, Tamil Nadu, Southern India Jayaraman Ranjitha, Balasundaram Ramakrishnan & Selvaraju Raja	64
65	A Study of Behavioural Patterns and Effect of Starvation on Fight Success in the Common House Cricket Acheta Domesticus  Jyothi V. & Bhavana C. B.	65

## Psychological Well Being and Social Avoidance and Distress Among Theist and Atheist

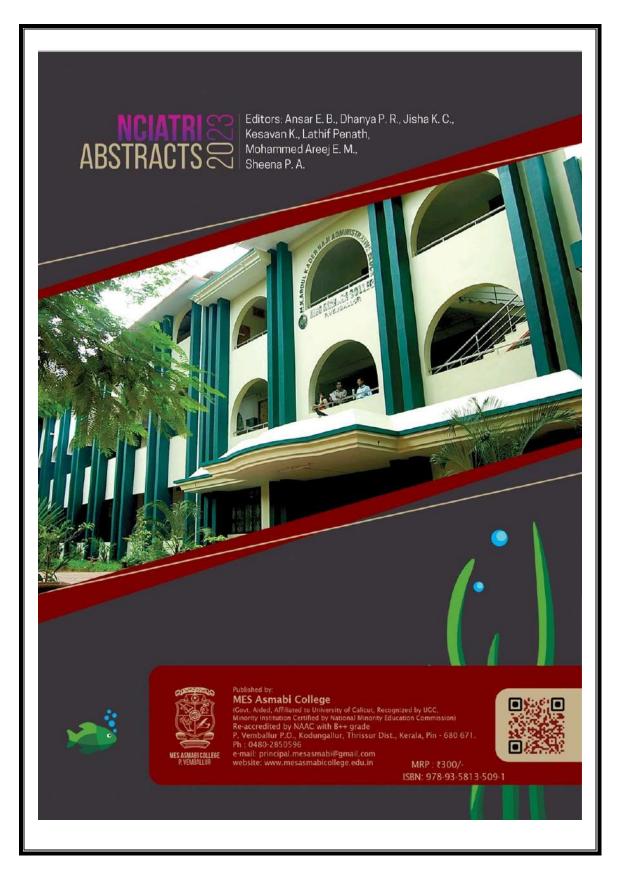
Rizwana M. A., Alfrya N. R., Sandra N. S., Abdul Salam & Farhana Nasar\*

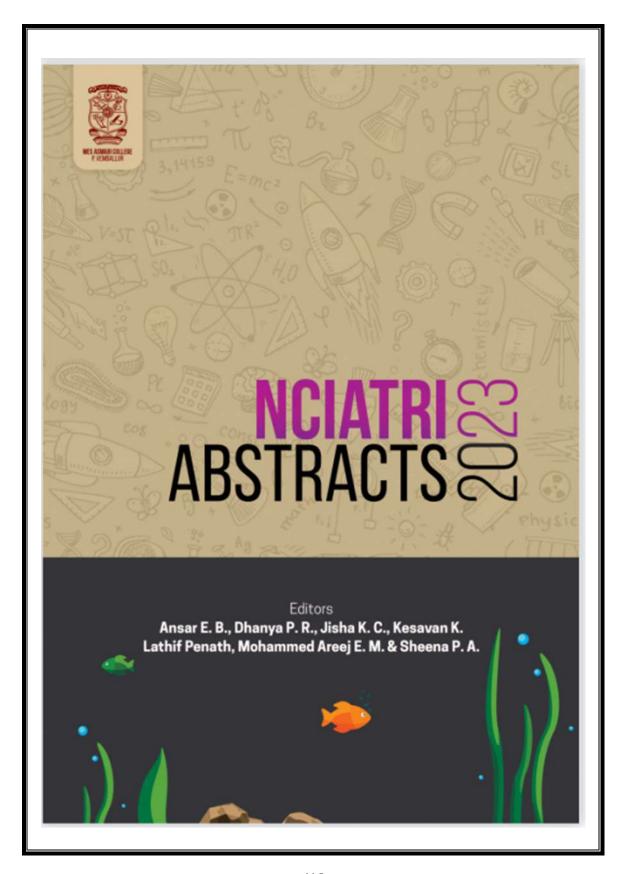
Dept. of Psychology, MES Asmabi College, P. Vemballur, Kodungallur, Kerala.

\*Corresponding author: farhananazar64.fn@gmail.com

There are different learning styles prevalent among students. The well-known among them are visual, auditory, and kinesthetic. The purpose of the present study was to analyze the effect of learning styles on the academic adaptation of high school students. The Learning Style Questionnaire (LSQ-30) was administered in three schools to identify the learning styles predominant among students. A sample of 180 students of class 8,9 and 10 were selected for the study through stratified sampling method. Pure Procrastination Scale and Motivational Engagement Instrument were used to measure academic adaptation. Kruskal-wallis test was used to determine significant difference in Academic Adaptation among students based on learning Styles and Mann-Whitney U test was used to determine significant difference in academic adaptation based on Gender. And the result shows that learning styles has a significant effect on Academic adaptation. There is no significant difference on academic adaptation based on gender.

KEYWORDS: Psychological Wellbeing, Social Avoidance & Distress, Theist & Atheist.





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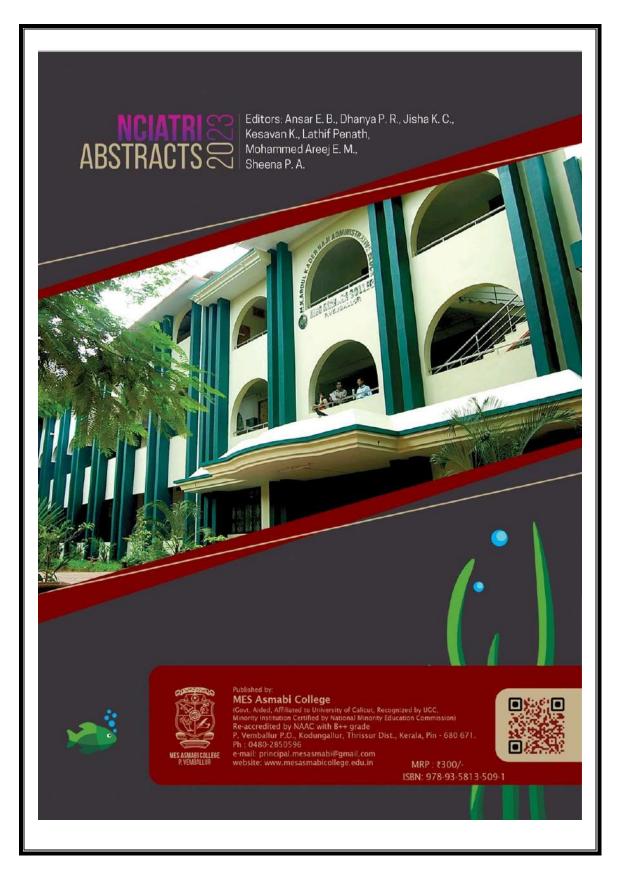
### Contents

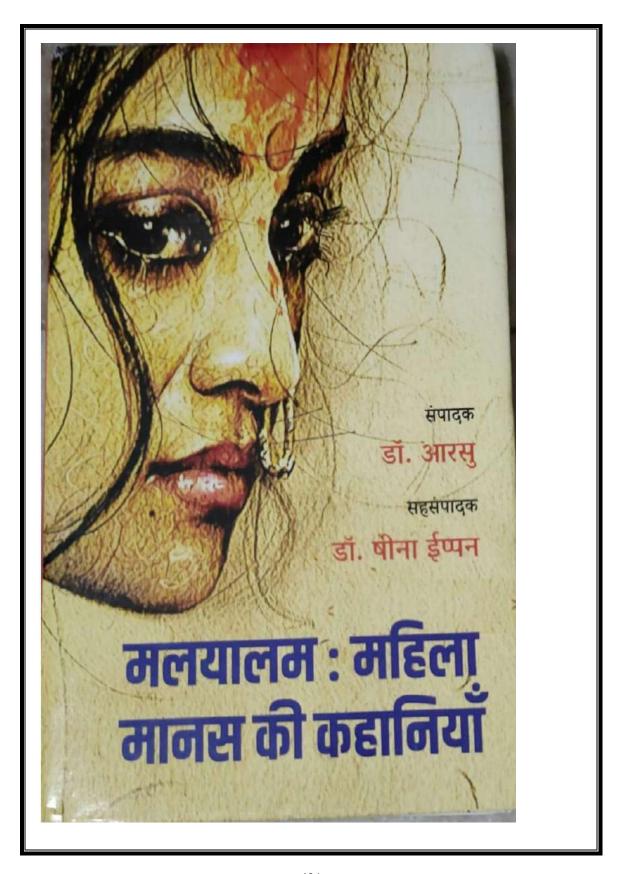
Sl. No.	Title & Authors	Page No.
53	Father's Involvement in Development of Emotional Maturity and Resilience Among Young Adult Males  Haritha Hari & Anna Pheenix T. S.	53
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65	A Study of Behavioural Patterns and Effect of Starvation on Fight Success in the Common House Cricket Acheta Domesticus  Jyothi V. & Bhavana C. B.	65

### A Study of Behavioural Patterns and Effect of Starvation on Fight Success in the Common House Cricket Acheta Domesticus

Jyothi V. & Bhavana C. B. Research & PG Dept. of Zoology, Union Christian College, Aluva, Kerala, India.

Ethology is the one of the major fields of research which has made various contributions to ecology. Crickets have been used as a model system in the behavioural studies due to its interesting behaviours like aggression, mate choices etc. Nymphs and adults of Acheta domesticus collected from Kalady region of Ernakulam District were used for this study. The crickets were acclimatized and reared in glass tanks, fed regularly and provided with water. The exploratory behaviour in a new environment, general activity in a new environment, aggressive behavioural difference between the wild and captive populations of male adult crickets, effect of starvation on the fight success in male crickets were studied. The latency to emerge into a new environment and the latency to touch the new environment were recorded. The nymphs showed lesser latency period than the adults. The lesser latency to emerge into a novel environment might be because of the domestication syndrome and a chance of developing boldness syndrome, the willingness to take risk in a novel area to explore. The study showed that captivity can change the personality traits in Acheta domesticus. The observation of general activity showed that nymphs were more active than the adults in walking and climbing. The reared Acheta domesticus were found to be more aggressive than the wild population. This may be due to the fact that the crickets which are captivity reared were subjected to interspecific competition due to high population density in the rearing conditions. The crickets, relatively equally sized, were subjected to three starvation conditions as less, equal and more based on the duration of attacker's starvation. It was found that probability of winning the fight by the attacker increased by the increase in the starvation period. Thus, starvation has a positive correlation in winning the fight.





पो हर जो नहीं की निपति बिराकृत समान है वाली उक्ति को रेखांकित करने व वे कहानियों सक्ष्म निकली है। बढ़ाण, ईसाई, इस्लाम, आदिवासी सभी वर्ग, क्यां जाति की निपते की समस्यारे लेखिकाओं की कलम से निस्त होने लागू फालक्स्म समार में अनिक्षित बदलाव भी नजर आने लगे।

प्रत्यावन महिला माउस की कहानियाँ भाषा समन्वय येदी का एक माझा प्रणाम है। अनुवाद के पाप्पम से भारतीय भाषाओं को आपस में मिलाने का कार भाष समन्वय वेदी की और से अध्यष्ट सम्माननीय डॉ. आरस् जी के नेतृत्व वे मार्त में जारे हैं। कशमीर से लंकर क-याकुमारी तक फैले हमारे देश की भाषाई विविध्याओं में एकता लाने का प्रणास वेदी ने अपने कंधों पर ले लिया है। मान्यालम महिला मानस की कहानियाँ नामक यह चयनिका इसका ज्वलत ज्वाहरण है। इन तमान कहानियों से गुजरते वक्त मालयालम की महिला कहानियों का एक प्राप्त हमें मिलेगा। नारी जागरण के लिए आवाज उठाने वाली, पुरुष वर्षस्व के विद्ध लड़ने बाती प्रराप कालीन लेकिकाओं को निकट से जानने का जो मीका प्राप्त हुआ, इसको में बत्स सीभाग्य मानती हूँ डॉ॰ आरस् जी मेरे आदरणीय गुरुवर है। आप ने ही मुझे यह दायिल सींपा था। आपके प्रति मैं हृदय से आभारी है।

दक्षिण भारत की अन्य भाषाओं से भी इस प्रकार लेखिकाओं की वपनिवाएं प्रकाशित होने से हिन्दी पाठकों को भारतीय महिला लेखन की एक रूपतेला मिल जएगी। "हीन्दी प्रदश के पाठक खुले मन से मलयालम चयनिका की स्वीकार करेंगे, इस आशा के साथ।

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(ह) मलयालम : महिला मानस को कहानियाँ

#### अनुक्रम

अनुवादक सांस्कृतिक एकता के संतरी (संपादकीय) / डॉ. आरसु-	04
सह संपादक की कलम से / डॉ. चीना ईप्पन-	07
सत्य का विनम्र स्वर/ललिताबिका अन्तर्जनम से बातचीत (टी.एन. जयचंद्र	4)-11
साहित्य सार्वजनिक दावत नहीं /माधवीकुटटी से बातचीत (शिबु पणमुख	ባ)-21
विद्रोही दुर्गा / ललिताविका अन्तर्जनम (अनु- इॉ. पी.एम. शांता)-	29
आत्महत्या / राजलक्ष्मी (अनु डॉ. एन. गिरिजा)-	40
मौ / माधवीकुट्टी (अनु- डॉ. थीना ईप्पन)-	44
ऑनमेरी की शादी / सारा जॉसफ (अनु- अनिता सी.)-	48
बाँसुरी / पी.वत्सला (अनु- डॉ. सुप्रिया- पी.)-	53
नापाक जस्म / ग्रेसी (अनु- डॉ. राधामणी पी.के.)-	57
विदाई /सारा थाँमस (अनु- राजेश.के.)-	61
तोहफा / पी.आर. स्यामला (अनु- डॉ. सूर्या बोस)-	67
अनामिका / एम.डी. राधिका (अनु- डॉ.ओ. वासवन)-	75
भलाई-बुराई / के.बी. श्रीदेवी (अनु- षीवा सी.पी.)-	79
हम जिंदगियां सेकने वाले / (खदीजा मृताज, अनु- बीना.के. नापर)	85
शिवेन सहनर्तनम् / अषिता (अनु- डॉ. जे. अंबिका देवी)-	94
यादों की नस / (के.आर. मीरा अनु- डॉ. अनीष सिरियक)-	98
काँच की चृड़ियाँ / प्रिया ए.एस. (अनु- डॉ- प्रमोद कोवप्रत)-	105
बच्चा जो रोबा नहीं / के.पी. सुधीरा (अनु- डॉ. प्रीता एम.के.)-	110
लेखिका के मरणोपरान्त / रेखा.के. (अनु- डॉ. आरस्)-	115
पत्नी का पागलपन /बी. एम. सुहरा (अनु - डॉ. आरसु-	122
पहचान / सितारा. एस. (अनु- डॉ. मेघा. ए.आर.)-	126
फिर बूंदा-बाँदी / आशा.के. (अनु- डॉ. रंजित. एम.)-	131
काली विल्ली/ पी.टी. राजलक्ष्मी/अनु- डॉ. आशीवाणी.के उषस्-	134
सागरनुमा आकाश / तनुजा एस भट्टतिरि (अनु- डॉ. मारग्रेट वी.जी.)-	137
अनुवादकों के संपर्क सूत्र-	142
and farmen and a state of the	142

इस पुस्तक के सर्वाधिकार सुरक्षित है। संधायक एवं प्रकाशक की शिकित अनुमति के दिना इसके किसी भी अंश की फोटोकापी एवं रिकार्डिंग स्रोटित इसेक्ट्रॉनिक अंधवा पर्शानी, किसी भी साध्यय से अंधवा ज्ञान के संग्रहण एवं पुनर्भयोग की प्रधानी द्वारा, किसी भी रूप में, पुनरूपादित अंधवा संचार प्रसारित नहीं किया जा सकता।

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### फिर बूंदा-बाँदी

उसने पर्दे के पीछे से देखा, नाटक खत्म होते ही सब लीग हील से वापस जा रहे थे। अब उसकी जान में जान आई। इतनी देर कैसे गुजरी... सोचा भी नहीं जा सकता। पद के पाठ ही खड़ा देख रहा था कि कोई शोर तो नहीं मचा रहा, एकटक... जिंदगी में पहली बार।

उसे लगा कि अंखिं मूंदे जा रही हैं। दो तीन दिनों की नींद बाकी है। सिर दुहा रहा है। ठंडे पानी से मुंह धोया... धोड़ी तसल्ली हुई। फिर भी नींद नहीं छुटी।

होल लगभग खाली हो चुका था। सभी अभिनेता अपने सामान बौध रहे थे। मच के एक ओर से वेणु सर आ रहे थे। उसने आशा के साथ सर के चेहरे की ओर ताका।

"नाटक बहुत अच्छा रहा। इतना मैने नहीं सोचा था। हरी का भविष्य उज्ज्वल होगा।"

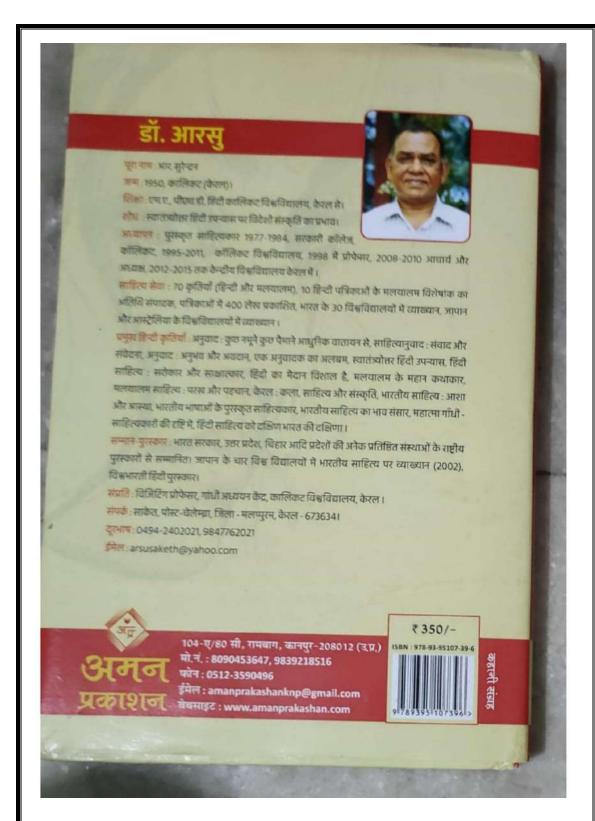
सर बोलते जा रहे थे... नाटक की किमयों, कॉलेज में एक नाटक क्लब होने की जरूरत आदि के बारे में। सर ऐसे ही बातूनी ढंग के आदमी हैं। उन बातों से उसे कोई मतलब नहीं है, तो भी वह नापसंदी नहीं दिखाता था। सर से कुछ कहने का साहस नहीं था. उसमें।

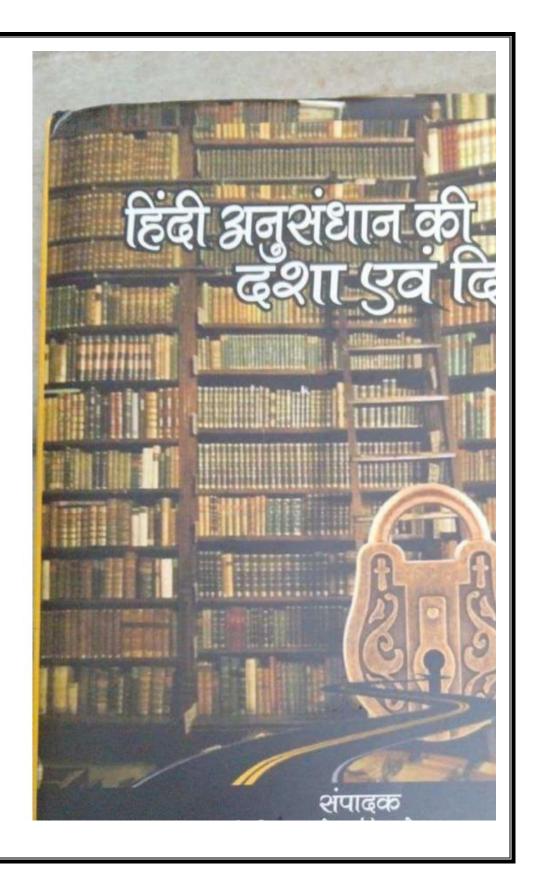
वह सोचता था कि इस एक महीने में वह सर के कितना करीब आ गया है। अकेलेपन से दम घूट रहा था तभी सर की यहाँ बदली हुई। तब तक कहने लायक कोई दोस्त उसका नहीं था। वह अपनी निजी जिंदगी में किसी और को दखल देने नहीं देता था।

वापस जाते वक्त सर मुड़कर कहा, "शाम को कमरे में आना, कुछ किताब दे दुँगा।"

उसने हामी भरी। ।सर के दूर निकलने तक वह देखता रहा। धूप उतर रही थी। सब लोग जा चुके थे। कमर का छत से कबूतर शोर मचाते हुए उड़ गए।

मलयालम : महिला मानस की कहानियाँ / (131)





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### अनुक्रम

	भूमिका	5
1.	हिन्दी अनुसंधान कार्य दशा व दिशा	9
	डॉ. बलराम गुप्ता	
2.	सामाजिक अनुसंधान की तुलनात्मक पद्धति	14
	शेख अफरोज	
3.	कविता में शोध के विविध आयाम	20
	कुलदीप शर्मा	
4.	हिन्दी अनुसन्धान की दशा व दिशा	28
	चंद्रप्रभा	200
5.	सूचना प्रौद्योगिकी एवं प्रयोजनमूलक हिंदी के संदर्भ में हिंदी	35
	शोध की दिशा एवं दशा	
	डॉ. रंजीत कुमार	10
6.	आधुनिक हिंदी शोध एवं अनुसंधान के विकास	48
	डॉ. सुनीता साह	50
7.	हिन्दी साहित्यिक अनुसंधान : स्वरूप और प्रविधि	59
	प्रो., डॉ. महेशकुमार जे. वाघेला	71
8.	तुलनात्मक साहित्यिक अनुसंधान : स्वरूप और प्रविधि	/1
	प्रो. डॉ. नीलम ए. सेन	78
9.	मलयालम भाषियों का हिंदी अनुसंधान एक विहंगम अवलोकन	10
	डॉ. रंजित.एम्	84
10.	अनुसंधान की परिभाषा एवं स्वरूप	OA
	डॉ. एस. बी. पाटिल	87
11.	शोध में विषय प्रवेश की भूमिका	01
	डॉ. मोनिका देवी	90
12.	शोध और आलोचना	50
	निमत कुमार शर्मा	



डॉ. मोनिका देवी

जन्म : कादरगढ़, जिला शामली (उत्तर प्रदेश)

शिक्षाः प्रारंभिक शिक्षा ग्रामीण विद्यालय में, स्नातक और स्नातकोत्तर शिक्षा मेरठ के चौधरी चरण सिंह विश्वविद्यालय से, दक्षिण भारत हिंदी प्रचार सभा मद्रास से एम.फिल्. और उस्मानिया विश्वविद्यालय हैदराबाद से हिंदी साहित्य में पी-एच.डी.। हैदराबाद के ही प्रख्यात

स्वयत्त निजाम कॉलेज से अनुवाद अध्ययन में डिप्लोमा।

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