


S.No. in Excel sheet	Name of the Professor	Title	ISBN	DEPARTMENT
46	Dr.K.Sheik Mydeen	Buyer preference towards various e shopping networks-a study in palayamkottai region	978-81-942482-4-8	COMMERCE
47	Dr.K.Sheik Mydeen	Green advertisement is an effective tool in recent trend	978-81-942482-4-8	
48	Dr.K.Sheik Mydeen	A study on customer satisfaction about organic food products in tirunelveli city	978-81-942482-4-8	
49	Dr. J.A.M.Omeray Farook	A conceptual study on money market in India	978-81-942482-4-8	
50	Dr.M.Syed Silaiga Benazir	A study on customer preference towards refrigerator in Palayamkottai	978-81-942482-4-8	
51	Dr. M. Abdul Rahman	A study on the problem and public awareness towards goods and service tax in Palayamkottai	978-81-942482-4-8	

INDIAN BUSINESS AND ECONOMIC TRANSITIONS IN THE GLOBAL SCENARIO

Dr. A. Hamil
Dr. S.M.A. Syed Mohamed Khaja
Dr. K. Sheik Mydeen
Dr. A. Jesuraj
K. Ahamed Anis Fathima

Proceedings of one day International Seminar organized by the
Integrated Department of Commerce (Unaided)
Sadakathullah Appa College
(Autonomous)



 (Reaccredited by NAAC at an 'A' Grade and ISO 9001:2015 Certified Institution)
Rahmath Nagar, Tirunelveli - 627 011

First Edition December 2019

**Copyright © 2019
Department of Commerce,
Sadakathullah Appa College (Autonomous)**

All rights reserved. Except for brief quotations in a review, this book or parts thereof must not be reproduced in any form without permission in writing from the publisher and authors.

ISBN: 978-81-942482-4-8

Price: ₹ 500.00

Printed in India

Printed at
Juhi Printers,
Tirunelveli,
Tamil Nadu, India

Published by
SADAKATHULLAH APPA EDUCATIONAL SOCIETY,
Rahmath Nagar,
Tirunelveli – 627 011,
Tamil Nadu, India
www.sadakath.ac.in

Sl. No.	CONTENTS	Page No.
13.	A Study on Perception of Investors Toward Gold as an Investors Avenue in Nagercoil Town R. Vasanthy	60
14.	A Study on Customer Satisfaction Towards Honda Scooters with Special Reference to Palayamkottai M. Mohammed Sikkandher & Dr. P. Geetha	65
15.	Awareness of E-Banking Services Among Rural Consumers in Tuticorin District P. Santhiya & Dr. M. Mohamed Siddik	69
16.	Buyer preference Towards Various E-Shopping Networks – A Study in Palayamkottai Region G. Velammal Selvi & Dr. K. Sheik Mydeen	73
17.	Total Quality Management (TQM) in Indian Rare Earth Limited (IREL), Chavara – A Case Study V.M. Sreeja Devi	78
18.	Policyholders perception towards the services rendered by Life Insurance Corporation of India in Tuticorin P.N. Mohamed Inzamam Ul Haq & Dr. M.N. Mohamed Abusali Sheik	84
19.	A Study on Job Satisfaction and Job Stress of TNSTC Employees of Tirunelveli District C. Priya & Dr. P. Geetha	89
20.	A Study on Quality of Work life of Women Schoolteachers in Ambasamudram Taluk V. Ulagammal, Dr. T.S. Subbulakshmi & Dr. S.M.A. Syed Mohamed Khaja	94
21.	Impact of Economic Transition on Indian Business in the global Scenario Dr. J. Mahil Kamalam	101
22.	A Study on Socio-Economic Conditions and Working patterns of Street Vendors in Tirunelveli P. Anis Priya & Dr. P. Geetha	106
23.	Banking Business in India A. Vaijeyanthi & Dr. A. Thangaraja	112
24.	A Study on Savings of Household Sector in India Dr. A. Benazir & Dr. S. Archana Bai	118
25.	A Study on Growth of Advertisements in Business Perspectives with Reference to Tirunelveli S. Selvakumari & Dr. A. Aruna Devi	123
26.	A Study on Environmental Management in Tirunelveli District M. Chandra & Dr. N. Kamala	127

16

BUYER PREFERENCE TOWARDS VARIOUS E-SHOPPING NETWORKS – A STUDY IN PALAYAMKOTTAI REGION

G. Velammal Selvi,

Ph.D. Scholar, Reg.no. 19111191012015, PG & Research Department of Commerce, Sadakathullah Appa College (Autonomous), Tirunelveli – 627 011.

Dr. K. Sheik Mydeen,

Head and Assistant Professor, Department of Commerce (Finance), Sadakathullah Appa College (Autonomous), Tirunelveli – 627 011.

Introduction:

In olden days consumers are virtually visiting the shops to purchase through physical stores but they feel more convenient to shop online for various features. In internet dominated world, consumers and organizations are developing their business by selling goods through online. Virtual shopping is now shifted into online shopping which is the method of e-commerce and it allows consumers to buy/sell goods/services through internet by using a web browser. Goods selling through the usage of online business gives a wider reach to target consumers. Online shopping having a high market share and reaches the consumers much faster than offline retailing. In online shopping consumers can directly buy goods without an intermediate person from the seller through internet. Online shopping has a quite wider in transaction between consumers and firms. This develops the communication and provides the features which is must similar to the virtual shopping in the place where products are exchanged between sellers and buyers.

Review of Literature:

M Nishad Nawaz, et al, (2014) in their study they reveal that buyers' behaviour in online shopping was studied by using different variable. Their study provoked that online shopping is in the rapid development in India. By choosing online networks as their shopping destination, consumers can buy product anywhere and they may have a choice to compare it with other products. In their study they find that male consumers are high in online shopping and most of the respondents find online shopping is the easiest one to get variety of products with lowest prices using different modes of payment.

Objectives of the Study:

- To know the reason for preferring online shopping
- To know the level of satisfaction on the product purchased by the respondents.
- To find out the problems faced by the customers while using online networks.

Materials and Methods:

Convenience sampling Method is used to collect the Primary Data from the Respondents. After the data was collected from various sources,

Sl. No.	CONTENTS	Page No.
27.	A Study on Service Quality of Public Sector Banks in Tirunelveli District A. Rooba & Dr. A. Aruna Devi	131
28.	A Study on Buyer Behaviour of Ice Cream in Palayamkottai Dr. V. Ponraj	134
29.	A Study on Impact of Indian Business and economic Transition M. Maheswari & Dr. N. Kamala	136
30.	A Study on International Trade in India M. Deena & Dr. A. Aruna Devi	139
31.	Artificial Intelligence in Accounting Sector by 2030 M. S. Bindhya	142
32.	Economic Empowerment of self-help group members by using Financial Inclusion in Tirunelveli District Y. Koilraj Shathrack, Dr. A. Jesuraj & Dr. A. Hamil	145
33.	A Study on Online Shopping Behaviour of College Students in Tirunelveli District S. Arumuga Selvi & Dr. N. Kamala	151
34.	Indian healthcare Industry –An Overview S. Bulomine Regi	156
35.	Usefulness of E-Commerce for traders Dr. Swapna K Cherian & Dr. John T. Abraham	160
36.	Business Development and Entrepreneur Development in India P. Nandhini & Dr. A. Aruna Devi	163
37.	A study on the Problems and Public awareness towards Goods and Service Tax in Palayamkottai Dr. M. Abdul Rahuman & Dr. A. Abdul Rahim	168
38.	A study on Customer Perception Towards Bank on Wheels H. Shamna	172
39.	A Conceptual study on Money Market in India J.A.M. Omeray Farook, J.A.S. Mohamed Ehya & Dr. S.M.A. Syed Mohamed Khaja	175
40.	A Study on Financial Literacy and Investment Behaviour Among Women Entrepreneurs in Palayamkottai, Tirunelveli N. Kalaimagal & Dr. P. Geetha	177
41.	Green Advertisement is an Effective Tool in Recent Trend S. Yasmin Kathija & Dr. K. Sheik Mydeen	183

41

GREEN ADVERTISEMENT IS AN EFFECTIVE TOOL IN
RECENT TREND

S. Yasmin Kathija,

Ph.D. Scholar, PG & Research Department of Commerce, Sadakathullah Appa College (Autonomous), Tirunelveli – 627 011.

Dr. K. Sheik Mydeen,

Assistant Professor and Head, Department of Commerce (Finance), Sadakathullah Appa College (Autonomous), Tirunelveli – 627 011.

Introduction

Advertising is the process by which companies can introduce their products and services in front of the consumer to gain their attention towards their products and services and to convey messages easily. Now a days with the demand of eco- friendly products is increased. So, many organizations produce eco-friendly products and taken into consideration of environmental protection and safety consumers are turning towards more on ecological products for the betterment of self as well as environment. “Product promotion based on environment related situations is the central idea of green advertising”. Green advertising promotional campaigns are associated with the eco-friendly products. Companies claims of using green/eco-friendly products constitute a form of green advertising.

Green advertising is done to target those particular groups (green consumers) they are conscious for themselves along with the environment. Green advertising is done like labels with green in colour and green schemes on the products, advertisement with the *natural claim* and print images of “natural” on products and advertisements must show environmental claim both intentionally and subliminally address the green movement which is generally refer to “green advertising”.

Green Advertising is done generally for those products which are supposed to be environmentally preferable to others. Green advertising is a new way to attract consumers with the features of green communication for the sustainable development or sustainable communication as this will help in detailing those features which consumers are looking for and in demand. With the help of green communication, the organizations retain their consumers for the long period of time in today’s scenario.

So, many organizations adopt “go Green” strategy is a natural phenomenon. Green advertisement helps to promote the products and services, this is one of the specific types of advertisement and focus on the relationship between products and environment. It highlights that the products are ecological products and benefits to the environment. Green advertising help to satisfy the customer needs through quality, availability, affordability, and without any effect on the environment. A communicator whose commitment to green advertising must focus on two set of consumer needs that area.

Sl. No.	CONTENTS	Page No.
42.	A Study on Customer Preference Towards Refrigerator in Palayamkottai Dr. M. Syed Sulaiga Benazir & Dr. M. Esakkiammal	189
43.	A Study on the Degree of Awareness and Satisfaction of the Credit Line in Gold by Non-Banking Financial Companies in Tirunelveli S. Palavesakrishnan & Dr. P. Abraham	192
44.	A Study on Customers' Satisfaction About Organic Food Products in Tirunelveli T. K. Asan Mydeen & Dr. K. Sheik Mydeen	197
45.	A Study on Growth Rate of MSME in India P. Mohammed Buhari Saleem & Dr. M. Mohamed Siddik	202
46.	A Study on Consumer Buying Behaviour Towards Horlicks Drinks in Tirunelveli J. Asanya Fathima & Dr. A. Hamil	205
47.	Composition Dealers Under Goods and Services Tax G. Nandha Kumar	208
48.	Implementation of GST in Special Reference to Cinema Theatre A. Elangovan & Dr. A. Jesuraj	210
49.	A Study on attitude of Consumers towards Online Shopping in Rathapuram Taluk S. Shelton & Dr. M. Fatima Rathy	213
50.	Impact of Television Advertisement on buying behaviour among College going girls in Palayamkottai with Special Reference to Herbal Cosmetic R. Mano Juliet & Dr. T. Stanley Davis Mani	216
51.	A study on Customer satisfaction towards Shivane's boutique in Palayamkottai K. Chitra, T.K. Asan Mydeen & Dr. S.M.A. Syed Mohamed Khaja	219
52.	Performance evaluation of rural entrepreneurs in Tirunelveli – an empirical study Dr. N. Vijaitha Christy & Dr. Angeline Sheba Albert	228

44

**A STUDY ON CUSTOMERS' SATISFACTION ABOUT
ORGANIC FOOD PRODUCTS IN TIRUNELVEI CITY**

T.K. Asan Mydeen,

Ph.D. Scholar, Reg. No. 18121191011007, PG & Research Department of Commerce,
Sadakathullah Appa College (Autonomous), Tirunelveli - 627 011.

Dr. K. Sheik Mydeen,

Assistant Professor & Head, Department of Commerce (Finance), Sadakathullah
Appa College (Autonomous), Tirunelveli - 627 011.

Introduction:

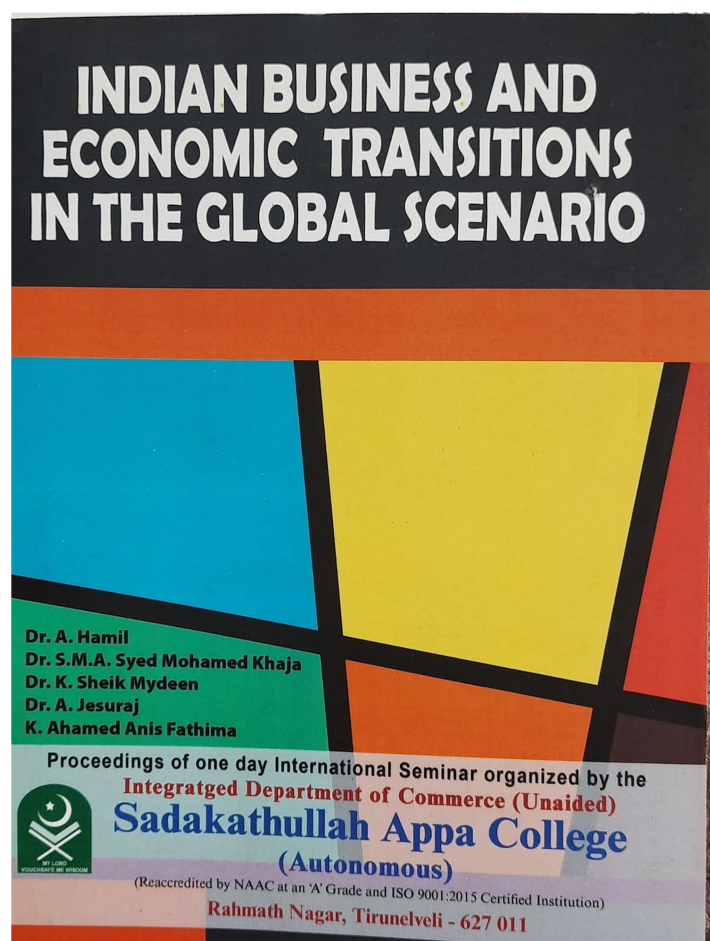
There is no common definition of "organic" because of the very fact that completely different countries have different normal for product to be certified "organic". In simplest words organic foods are minimally processed to take care of the integrity of the food while not artificial ingredients, preservatives or irradiation. Organic product is obtained by processes friendly to the setting, by cultivation techniques that contemplate each the attributes of the ultimate product and therefore the production ways. A wide variety of shoppers of organic food and non-organic food were addressed and scrutinized to get their observations and visions towards organic food. All organic food shoppers aren't having a similar technique of approach towards organic food. Subsequently the applied math method guides America to grasp the relation and therefore the model of the patron behaviour trends in organic food in Asian country. The Definition of the word "Organic", associate degree ecological management production system that promotes and enhances diverseness, biological cycles and soil biological activity. It is based on the minimal use of off-farm inputs and on management practices that restore, maintain and enhance "ecological harmony" (National Standards Board of the US Department of Agriculture (USDA)).

Organic food production may be a self-regulated trade with government oversight in some countries, distinct from non-public farming. Currently, the Union, the U.S., Canada, Japan and plenty of different countries need producers to get special certification supported government-defined standards so as to promote food as organic within their borders. In the context of these regulations, foods marketed as organic are 11 produced in a way that complies with organic standards set by national governments and international organic industry trade organizations.

Objectives of the Study:

- To study the consumer perceptions towards purchase of organic products in Tirunelveli.
- To find out the factors influencing the consumers in making purchase decision of organic products.
- To examine the awareness level of customers.
- To study the buying behaviour of consumers towards organic food products.

S.No in excel sheet	Name of the teacher	Title	ISBN/ISSN	DEPARTMENT
51	Dr. M. Mohamed Siddik	Green Advertisement is an Effective tool in recent trend	9788194248248	COMMERCE
52	Dr. P. Buhari Saleem	A study on growth rate of MSME in India	9788194248248	
53	Ms K. Chitra	A customer Satisfaction Towards Shivane's Boutique in Palayamkottai	9788194248248	
54	Dr. M. Esakiaammal	A Study On Customer Preference Towards Refrigerator In Palayamkottai	9788194248248	



First Edition December 2019

**Copyright © 2019
Department of Commerce,
Sadakathullah Appa College (Autonomous)**

All rights reserved. Except for brief quotations in a review, this book or parts thereof must not be reproduced in any form without permission in writing from the publisher and authors.

ISBN: 978-81-942482-4-8

Price: ₹ 500.00

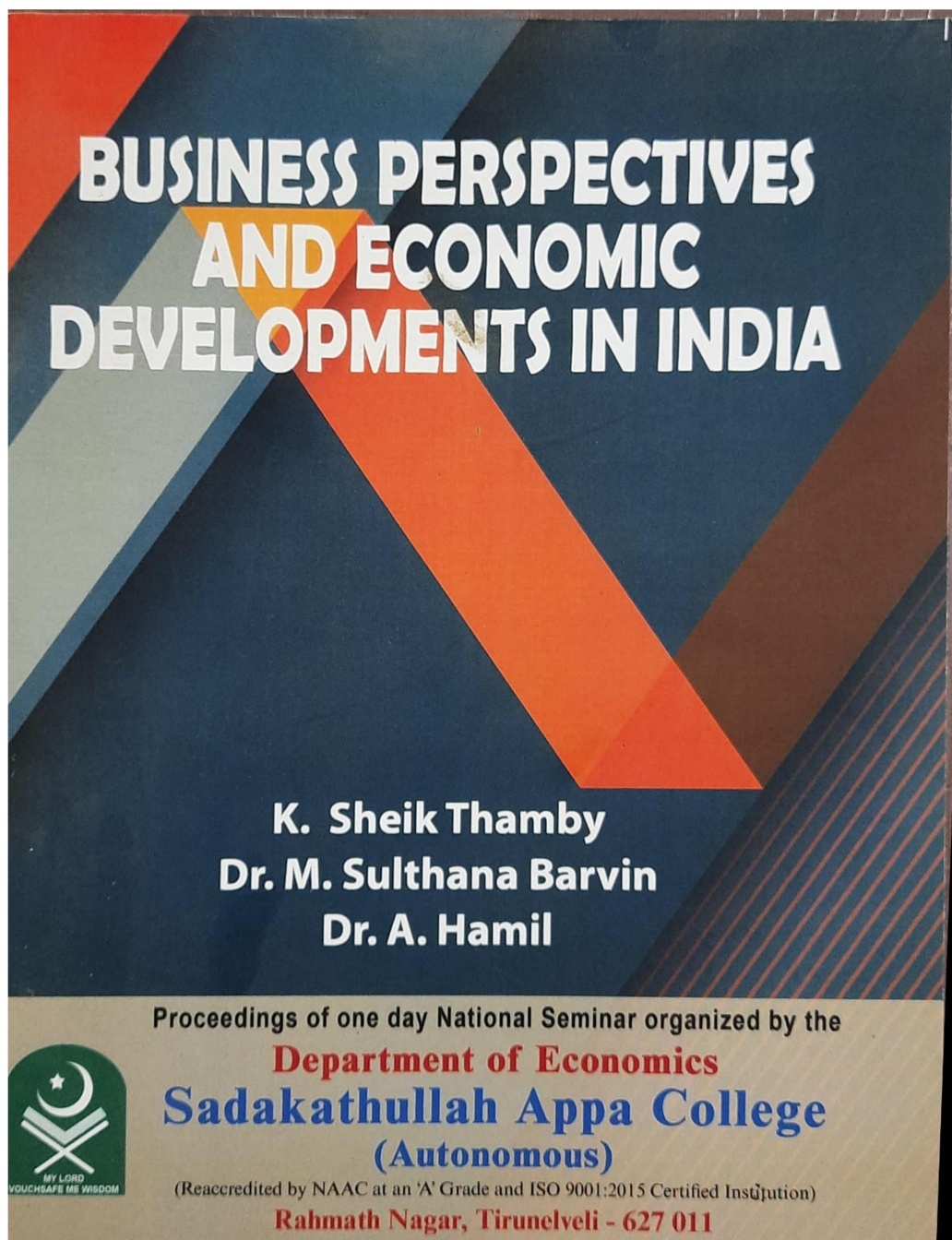
Printed in India

**Printed at
Juhi Printers,
Tirunelveli,
Tamil Nadu, India**

**Published by
SADAKATHULLAH APPA EDUCATIONAL SOCIETY,
Rahmath Nagar,
Tirunelveli - 627 011,
Tamil Nadu, India
www.sadakath.ac.in**

Sl. No.	CONTENTS	Page No.
42.	A Study on Customer Preference Towards Refrigerator in Palayamkottai Dr. M. Syed Sulaiga Benazir & Dr. M. Esakkiammal	189
43.	A Study on the Degree of Awareness and Satisfaction of the Credit Line in Gold by Non-Banking Financial Companies in Tirunelveli S. Palavesakrishnan & Dr. P. Abraham	192
44.	A Study on Customers' Satisfaction About Organic Food Products in Tirunelveli T. K. Asan Mydeen & Dr. K. Sheik Mydeen	197
45.	A Study on Growth Rate of MSME in India P. Mohammed Buhari Saleem & Dr. M. Mohamed Siddik	202
46.	A Study on Consumer Buying Behaviour Towards Horlicks Drinks in Tirunelveli J. Asanya Fathima & Dr. A. Hamil	205
47.	Composition Dealers Under Goods and Services Tax G. Nandha Kumar	208
48.	Implementation of GST in Special Reference to Cinema Theatre A. Elangovan & Dr. A. Jesuraj	210
49.	A Study on attitude of Consumers towards Online Shopping in Rathapuram Taluk S. Shelton & Dr. M. Fatima Rathy	213
50.	Impact of Television Advertisement on buying behaviour among College going girls in Palayamkottai with Special Reference to Herbal Cosmetic R. Mano Juliet & Dr. T. Stanley Davis Mani	216
51.	A study on Customer satisfaction towards Shivane's boutique in Palayamkottai K. Chitra, T.K. Asan Mydeen & Dr. S.M.A. Syed Mohamed Khaja	219

S.No in Excel sheet	Name of the teacher	Title	ISBN/ISSN	DEPARTMENT
55	Dr. M. Esakiaammal	A Study On Customer Preference Towards Mobile Phone In Palayamkottai	9788194248231	COMMERCE
56	Dr. M. Sulaiga Benazir	A Study On Customer Preference Towards Mobile Phone In Palayamkottai	9788194248231	



First Edition December 2019

Copyright © 2019
Department of Economics,
Sadakathullah Appa College (Autonomous)

All rights reserved. Except for brief quotations in a review, this book or parts thereof must not be reproduced in any form without permission in writing from the publisher and authors.

ISBN: 978-81-942482-3-1

Price: ₹ 500.00

Printed in India

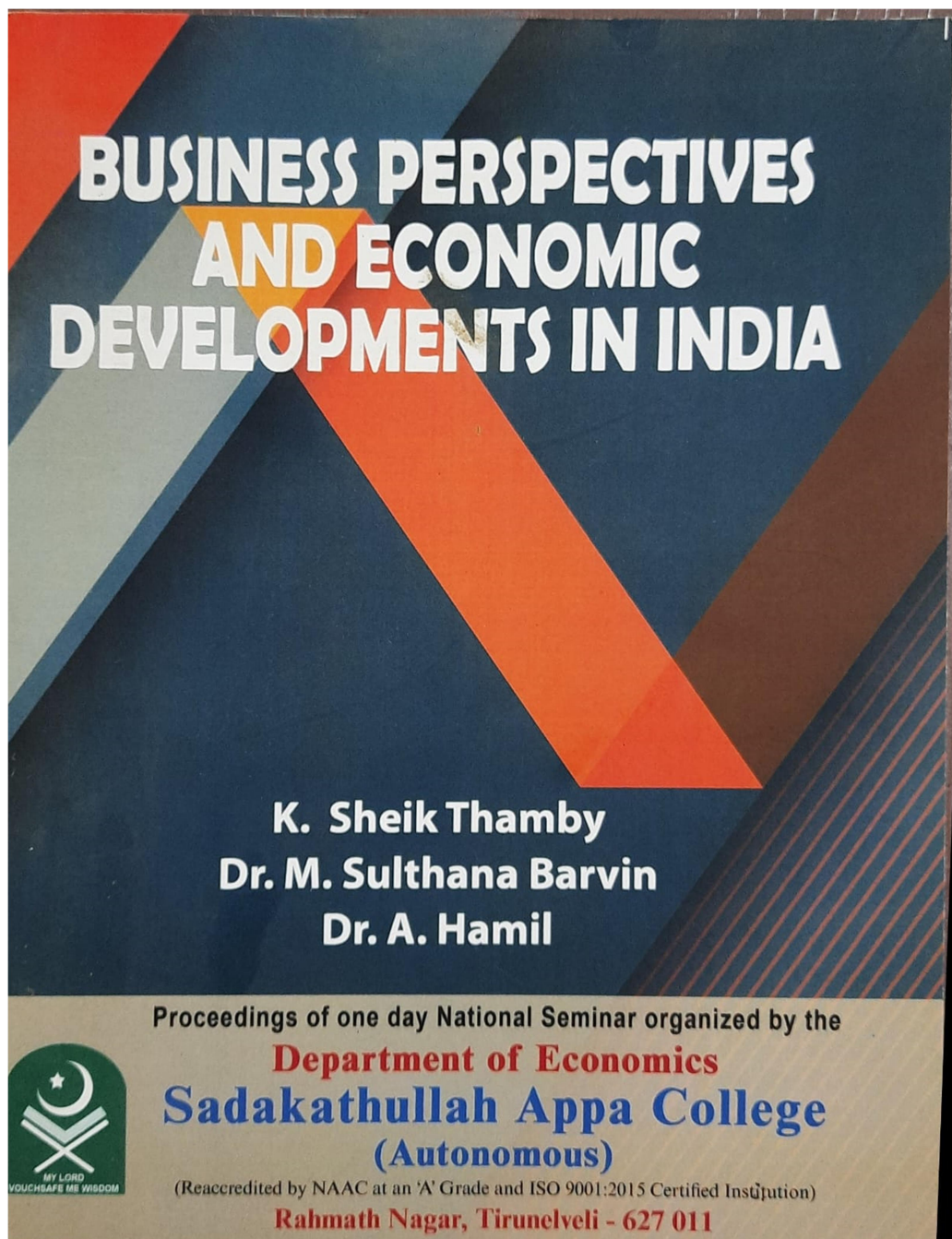
Printed at
Juhi Printers,
Tirunelveli,
Tamil Nadu, India

Published by
SADAKATHULLAH APPA EDUCATIONAL SOCIETY,
Rahmath Nagar,
Tirunelveli - 627 011,
Tamil Nadu, India
www.sadakath.ac.in

Contents

Sl. No.	Title	Page No.
1	Changes in Indian Agriculture: A Composite Analysis <i>Dr. R. Karthikeyan and S. Barathi</i>	1
2	A Study on job satisfaction with Special Reference to Un-Aided School Teachers in Thoothukudi District <i>K. Chandra, S. Vedha Valli and Dr. V. Sangeetha</i>	10
3	Performance of Spices Export in India <i>Dr. P. Sekar and T. Musthafa</i>	15
4	A study on Customer Satisfaction towards Sports Bike with special reference to age group of 18 to 35 in Tirunelveli City <i>Ed. Priyadharshini and Dr. A. Hamil</i>	23
5	A study on Economic Development of Rural Women through Self-Help Group with special reference to Tirunelveli District <i>A. Abdul Rahuman and Dr. A. Abdhul Rahim</i>	28
6	A study of employee grievance handling procedure in a Textile Indsutry <i>A.T.S. Karthekeyan and Dr. Mahesh</i>	32
7	Cost, Service Quality and Customer Satisfaction in Indian Airline Industry <i>Dr. P. Anbuoli</i>	38
8	Impact of Social Media Marketing on Performance of Micro and Small Business <i>I.S. Sreekanth and I.S Sreenath</i>	45
9	Role of Self-Help Groups on the Socio-economic Development of Rural Household Women in Rathapuram Block, Tirunelveli <i>Dr. S. Mallika</i>	48
10	A study on advancement of Kissan Credit Card System in India <i>Dr. A. Benazir and Dr. M. Sulthana Barvin</i>	57
11	Role of Micro finance in Women Empowerment in Rural Tamil Nadu - An Empirical Evidence <i>N. Manimekala</i>	63
12	An empirical study on evaluating the marketing strategies of Financial and Insurance Service Providers <i>P. William Robert and Dr. M.S. John Xavier</i>	72
13	A study on customer preference towards Mobile Phone in Palayamkottai <i>Dr. M. Esakkiammal and Dr. M. Syed Sulaiga Benazir</i>	82

S.No in Excel sheet	Name of the teacher	Title	ISBN/ISSN	DEPARTMENT
57	Dr. M. Sulthana Barvin	A Study Of On Advancement Of Kissan Credit Card System In India	9788194248231	ECONOMICS



First Edition December 2019

Copyright © 2019
Department of Economics,
Sadakathullah Appa College (Autonomous)

All rights reserved. Except for brief quotations in a review, this book or parts thereof must not be reproduced in any form without permission in writing from the publisher and authors.

ISBN: 978-81-942482-3-1

Price: ₹ 500.00

Printed in India

Printed at
Juhi Printers,
Tirunelveli,
Tamil Nadu, India

Published by
SADAKATHULLAH APPA EDUCATIONAL SOCIETY,
Rahmath Nagar,
Tirunelveli - 627 011,
Tamil Nadu, India
www.sadakath.ac.in

Contents

Sl. No.	Title	Page No.
1	Changes in Indian Agriculture: A Composite Analysis <i>Dr. R. Karthikeyan and S. Barathi</i>	1
2	A Study on job satisfaction with Special Reference to Un-Aided School Teachers in Thoothukudi District <i>K. Chandra, S. Vedha Valli and Dr. V. Sangeetha</i>	10
3	Performance of Spices Export in India <i>Dr. P. Sekar and T. Musthafa</i>	15
4	A study on Customer Satisfaction towards Sports Bike with special reference to age group of 18 to 35 in Tirunelveli City <i>Ed. Priyadharshini and Dr. A. Hamil</i>	23
5	A study on Economic Development of Rural Women through Self-Help Group with special reference to Tirunelveli District <i>A. Abdul Rahuman and Dr. A. Abdhul Rahim</i>	28
6	A study of employee grievance handling procedure in a Textile Indsutry <i>A.T.S. Karthekeyan and Dr. Mahesh</i>	32
7	Cost, Service Quality and Customer Satisfaction in Indian Airline Industry <i>Dr. P. Anbuoli</i>	38
8	Impact of Social Media Marketing on Performance of Micro and Small Business <i>I.S. Sreekanth and I.S Sreenath</i>	45
9	Role of Self-Help Groups on the Socio-economic Development of Rural Household Women in Rathapuram Block, Tirunelveli <i>Dr. S. Mallika</i>	48
10	A study on advancement of Kissan Credit Card System in India <i>Dr. A. Benazir and Dr. M. Sulthana Barvin</i>	57
11	Role of Micro finance in Women Empowerment in Rural Tamil Nadu - An Empirical Evidence <i>N. Manimekala</i>	63
12	An empirical study on evaluating the marketing strategies of Financial and Insurance Service Providers <i>P. William Robert and Dr. M.S. John Xavier</i>	72
13	A study on customer preference towards Mobile Phone in Palayamkottai <i>Dr. M. Esakkiammal and Dr. M. Syed Sulaiga Benazir</i>	82

S.No in Excel sheet	Name of the Professor	Title	ISBN	DEPARTMENT
58	Dr.R.R.Saravanakumar	Application of Bradford's Law of Scattering to the Research Publications of Alagappa and Bharathidasan Universities - A Comparative Study	978-81-941886-2-9	LIBRARY AND INFORMATION SCIENCE
59	Dr.M.Antina Pathumaragam	Changing the face of College Libraries into e-Learning Centres	978-81-941886-2-9	
60	Dr.M.Antina Pathumaragam	Transforming College Library into Green Library: A Challenge	978-81-941886-2-9	
61	Dr.M.Antina Pathumaragam	Android Apps for Library and Information Science Professionals	978-81-941886-2-9	



ICTAL 2030
Proceedings of the
International Conference
on
Transforming Academic Libraries : Vision 2030

November 14, 15 & 16, 2019

EDITORS

Dr. J. Janet
Dr. S. A. Fazlur Rahirhan
Dr. S. Srinivasaragavan
Dr. M. Dorairajan
Dr. P. Ganesan

Dr. J. P. Ananth
Dr. P. Ashoka Varthanan
Dr. S. Balakrishnan
Dr. K. Lakshmi
Dr. D. Maruthachalam
Dr. K. Nagarajan
Dr. V. Ragavi
Dr. K. Sasi Kala Rani
Dr. S. Sophia
Dr. N. Susila

Dr. K. G. Sudhier
Dr. K. Mohamed Haneefa
Dr. M. Tamizchelvan
Dr. S. Dhanavandan
Dr. A. Senthamilselvi
Dr. R. R. Saravanakumar
Dr. S. Aravind
Dr. N. Sundar

Organized by

VANKATRAM LEARNING CENTRE
Sri Krishna College of Engineering and Technology
Sugunapuram, Kuniyamthur (Post), Coimbatore - 641 008
Tamil Nadu, India.
www.skccet.ac.in

in association with
ACADEMIC LIBRARY ASSOCIATION
Tamil Nadu

- UTILIZATION OF ELECTRONIC RESOURCES BY THE STUDENTS OF ENGINEERING COLLEGES IN MADURAI DISTRICT 430
M. Muthumani¹ Dr.K.Chinnasamy²
- USER'S PERCEPTION IN A HEALTH SCIENCE DIGITAL LIBRARY – A STUDY OF KMC CENTRAL LIBRARY MANGALORE 434
Dr. Pooja
- NEWSPAPER READING HABITS OF SECONDARY Vs. HIGHER SECONDARY STUDENTS OF MADURAI CITY : A CASE STUDY 439
Dr. P. Padma¹ Dr. K. Ramasamy²
- ATTITUDE OF READERS TOWARDS THE ACADEMIC INFORMATION ACCESS AND RESOURCES IN ACADEMIC LIBRARY IN BANGALORE INDIA: A STUDY 446
B. Vinod Kumar¹ Dr. S. Aravind²
- ADOPTION AND EFFECTIVE UTILIZATION OF EDUCATIONAL TECHNOLOGIES AMONG THE FACULTY OF TECHNOLOGICAL EDUCATION 450
Dr. Rajendra Babu¹ H. Mahalakshmi. K. R.²
- IMPACT AND UTILIZATION OF SCHOOL LIBRARY INFORMATION RESOURCES BY HIGHER SECONDARY SCHOOL STUDENTS: A STUDY 457
S. Muthuvennila¹ Dr. S. Thanuskodi² Dr.C.Sathiavathy³
- ~~MARKETING OF INFORMATION PRODUCTS AND SERVICES AT MADURAI KAMARAJ UNIVERSITY IN MADURAI~~ 463
S. Maskoora¹ M. Karuppasamy² G. Mala Devi³ M. Fathima Beevi⁴
- USE OF 4G MOBILE BY WOMAN LECTURERS IN VIRUDHUNAGAR DISTRICT 467
Karuppasamy P¹ Manohari.S² Amudha G³
- FAMILIARS AND ADOPTING TO READ ELECTRONIC PERIODICALS IN ACADEMIC LIBRARY READERS – A STUDY 471
Sharmala Nilesh Muzumdar¹ Dr. K. Chinnasamy²
- USER SATISFACTION AND QUALITY SERVICE IN LIBRARIES: A GENERAL ASSESSMENT 475
Sarita S Rajan¹ Abhilash Babu R²
- E-SATISFACTION WITH RESOURCES AND SERVICES OF ANNA CENTENARY LIBRARY CHENNAI: A USER STUDY 482
C. Kasimani¹ P. Veeramuthu²

SESSION VIII

BIBLIOMETRICS, SCIENTOMETRICS AND OTHER METRIC STUDIES AND RESEARCH ANALYTICS

- WHERE DO INDIAN BIOCHEMISTS PUBLISH? : A STUDY ON WEB OF SCIENCE 655
Dr. K. G. Sudhier
- SCIENTOMETRIC STUDY OF LITERATURE ON INDIAN JOURNAL OF ALLERGY 664
ASTHMA AND IMMUNOLOGY FROM 2014 TO 2018
Pi. Janaarathanan¹ Dr.K. Nithyanadam²
- COLLABORATION STRATEGIES FOR PUBLISHING INDIAN RESEARCH ARTICLES IN 671
INTERNATIONAL JOURNALS NEED FOR A BIBLIOGRAPHIC ANALYSIS
Dr. S. A. Fazlur Rahiman
- A BIBLIOMETRIC OVERVIEW OF AUTHORSHIP PATTERN IN PEARL: A JOURNAL 675
OF LIBRARY AND INFORMATION SCIENCE
K.Balasubramanian¹ R. Jayabal²
- SCIENTOMETRIC ANALYSIS OF DIGITAL LIBRARY RESEARCH LITERATURE 679
Dr.A.Senthamilselvi¹ P.Sivaranjani² G.Priyadharshini Bernath³
- CITATION ANALYSIS OF THESES IN BOTANY SUBMITTED TO THE SHIVAJI 686
UNIVERSITY KOLHAPUR 1964-2010
Prof. D D Waghmare
- GROWTH OF LITERATURE ON ULTRASONICS RESEARCH DURING 2009 TO 2018 : 693
A SCIENTOMETRICS STUDY
J. Shanmugapriya¹ E.S.Kavitha²
- LITERATURE IN THE FIELD OF CHIKUNGUNYA: A SCIENTOMETRIC ANALYSIS 699
Dr. J. Ramakrishnan¹ Dr. G. Ravi Sankar² Dr. K. Thavamani³
- SCIENTOMETRIC MAPPING OF AUTHORSHIP PRODUCTIVITY AND 711
COLLABORATIVE RESEARCH IN ENTOMOLOGY: THE GLOBAL PERCEPTION
Dr. S. Kanagasundari¹ Dr. A. Senthamilselvi²
- AUTHORSHIP PATTERN IN AEROSPACE ENGINEERING: A SCIENTOMETRIC 722
ANALYSIS
Shyne Martin¹ Dr. S.A. Fazlur Rahiman²
- APPLICATION OF BRADFORD'S LAW OF SCATTERING TO THE RESEARCH 730
PUBLICATIONS OF ALAGAPPA AND BHARATHIDASAN UNIVERSITIES –
A COMPARATIVE STUDY
M.Manthiramoothi¹ Dr.R.R.Saravankumar² Dr.A.Thirumagal³
- BIBLIOMETRIC STUDY OF BAMBOO LITERATURE 734
George K. F.

APPLICATION OF BRADFORD'S LAW OF SCATTERING TO THE RESEARCH PUBLICATIONS OF ALAGAPPA AND BHARATHIDASAN UNIVERSITIES – A COMPARATIVE STUDY

M. Manthiramoorthi¹ Dr. R. R. Saravankumar² Dr. A. Thirumagal³

¹Part-Time Research Scholar (LIS), Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli.

²Librarian, Sadakathulla Appa College, Palayamkottai, Tirunelveli.

³Librarian, Manonmaniam Sundaranar University, Abishekapatti, Tirunelveli.

Abstract

This paper deals with the comparative study of author productivity based on Lotak's law and Bradford's law of scattering to the research publications of Alagappa and Bharathidasan Universities. The data for the study collected from Web of Science (WOS) database from the period of 2009 to 2018. Straight counting method applied to author productivity for both universities. A total of 1726 research publications from Alagappa University similarly 2778 research publications from Bharathidasan University contributed during the span of study period. The result shows that the Journal of materials science-materials in electronics with 75 (4.62%) articles of Alagappa University and RSC Advances with 72 (2.78%) articles of Bharathidasan University ranked as first in the rank list of journals. The scattering of articles in various journals shows that 1624 articles published from 520 journals from Alagappa University similarly 780 journals published 2586 articles from Bharathidasan University and the journal distribution pattern of both universities fit Bradford's law of scattering.

Keywords: Bradford's Law, Alagappa, Bharathidasan, University, Tamilnadu

Introduction

In 1934, the idea of core journals was first identified by S.C. Bradford. He explained about the scattering of research articles in different journals. It helps libraries to identify core journals in given subject field from large number of journals. The aim of Bradford's law is to identify the highest productivity of journals which could be arranged in an order of highest to lowest productivity of journals. According to this law the journals grouped in to a number of zones each had similar number of articles. Then the relationship between the zones is $1:n:n^2$.

The bibliometric analysis would be helpful to understand about the publications of research carried out by the faculties of Alagappa and Bharathidasan Universities. The study aims to identify the growth of research publications in Alagappa and Bharathidasan Universities which in South Tamilnadu, India taken in to consideration for the present study to analysis the research output of publications. The research outputs analysed by year wise distribution, average citations per paper and Bradford's laws have also been tested.

OBJECTIVES

The main objectives of this study are to:

1. Analyse the year-wise research productivity and average citation per paper of Alagappa and Bharathidasan Universities publications.
2. To prepare the rank list of journals and study the phenomenon for the scattering of publications in Alagappa and Bharathidasan Universities.
3. To verify Bradford's law of scattering to research publications.

METHODOLOGY

The present study focussed to verify Bradford's law of scattering of publications in various journals of Alagappa and Bharathidasan Universities research output published during 2009 – 2018. The data for this study collected from Web of Science (WOS) database (updated in 15.09.2019). Search term " Alagappa University" and "Bharathidasan University" used to search in the address field. The downloaded data which include 1726 research publications appeared in Alagappa university and 2278 research publications in Bharathidasan university. The scattering of journals with the frequency of articles tested by Bradford's law. The data analysed by softwares such as Bibexcel, MSEXcel.

Contents

SESSION I

ROLE OF ACADEMIC LIBRARIES IN GOVERNMENTAL INITIATIVES: DIGITAL INDIA, SWACHH BHARAT MISSION, MAKE IN INDIA, GREEN INDIA MISSION, HERITAGE DOCUMENTATION, ETC.

- IMPACT OF FIVE LAWS OF LIBRARY SCIENCE AS A CLASSIC ON TRANSFORMING LIBRARIES: VISION 2030 1
Prof. Dr. B. Ramesh Babu
- DOCUMENTATION OF CULTURAL AND GEOGRAPHICAL HERITAGE IN BHARATHIDASAN UNIVERSITY TIRUCHIRAPPALLI: A CASE STUDY 14
Jaya Suriya Dheva R S¹ Vedashawmya K S²
- HERITAGE DOCUMENTATION: LIBRARIES ROLE IN CREATING LOCAL HERITAGE DOCUMENTATION AN OVERVIEW 19
Dr. B. Raviivvenkat
- MOBILE TECHNOLOGY APPLICATION AND ITS IMPACT ON ACADEMIC LIBRARIES 25
Dr. P. Ganesan¹ V Jayasree² P.K. Sreekala³
- LET OUR LIBRARIES GO-GREEN 31
P. Shyni¹ Dr.S.Rajeswari² Dr.Shivarama Rao K³
- SWACHH BHARAT MISSION AND LIBRARIES 34
S.Satish¹ Vandana Chandere²
- CHARACTERISTIC AND ELEMENTS OF GREEN DESIGN FOR LIBRARIES - A STUDY 36
Murugananda Jeyanthi. R¹ Dr. Aravind. S²
- SUSTAINABLE DEVELOPMENT OF GREEN LIBRARY 40
Thaniyalakshmi G¹ Preethi P² Dhivya Bharathi M³
- IMPLEMENTATION OF GREEN LIBRARIES IN MANONMANIAM SUNDARANAR UNIVERSITY TIRUNELVELI 45
S.Faheemaa Rahmath¹ K.Mari Raja² K.Usha³ Dr.R.R.Saravanakumar⁴
- NATIONAL DIGITAL LIBRARY OF INDIA 49
Dr.J.Viswanathan
- TRANSFORMING COLLEGE LIBRARY INTO GREEN LIBRARY - A CHALLENGE 53
C. Sivaranjani¹ R. Ramalakshmi² R. Gowsalya³ Dr. M. Antina Pathumaragam⁴

SESSION II

NEXT GENERATION LIBRARY TECHNOLOGIES: AI, BIG DATA, IOT, BLOCK CHAIN TECHNOLOGY, LIBRARY APPS, MACHINE LEARNING, ETC.

- TRANSFORMING ACADEMIC LIBRARIES IN NIGERIA BY 2030 : CHALLENGES AND OPPORTUNITIES 57
Elijah O Ode
- APPLICATION OF QR CODE IN LIBRARY AND INFORMATION SERVICES 62
Dr.M.Dorairajan¹ D.Priyadharsini²
- IMPLEMENTATION OF RFID TECHNOLOGY IN A UNIVERSITY LIBRARY: A CASE STUDY OF THE CENTRAL LIBRARY CENTRAL UNIVERSITY OF TAMIL NADU 64
K. Lavanya¹ Dr. K.G. Sudhler²
- ARTIFICIAL INTELLIGENCE IN LIBRARY & INFORMATION SCIENCE 71
Dr. Sangita Parohit
- EARLY PREDICTION OF TYPE 2 DIABETES USING MACHINE LEARNING TECHNIQUES 75
Rajasekaran Thangaraj¹ Sivaramakrishnan Rajendar² Jayasheelan Palanisamy³ Vishnu Kumar Kaliappan⁴
- CLOUD COMPUTING AND ITS APPLICATION IN LIBRARIES: AN OVERVIEW 81
Subavenrapandiyam A¹ T.K.TamilBharathi² Divya VM³
- INFLUENCE OF CLOUD COMPUTING ON LIBRARIES: AN OVERVIEW 88
V.K. Varsha¹ M. Monika²
- SECURED ARCHITECTURE FOR IOT ENABLED SMART LIBRARY MANAGEMENT 93
J Ronald Martin¹ S Arockiasamy² M Dorairajan³
- BLOCK CHAIN TECHNIQUE IN THE LIBRARY - A VIEW 96
Akshaya M¹ Athul Mahiba Joy I² Dr.K.Vijayalakshmi³ Dr.R.Seethalakshmi⁴
- AUTOMATING AND SECURING THE ACCESS OF LIBRARY THROUGH FACE RECOGNITION USING DEEP LEARNING INTEGRATED WITH RFID TECHNOLOGY 99
Anantha Prabha P¹ Suchitra G² Vigneshbalaji S A³ Soundarya S⁴ Surya C S⁵ Vijayakumar K⁶
- ANDROID APPS FOR LIS PROFESSIONALS: OVERVIEW 105
K. Mohamed Rizwan¹ N. Mohamed Abdur Rahman Wahid² N. Mohan Kumar³
Dr. M. AstinaPathumaranagam⁴
- APPLICATION OF INTERNET OF THINGS (IOT) IN ACADEMIC LIBRARIES 108
K.Latha

TEACHING AND LEARNING PRACTICES, E-LEARNING AND M-LEARNING 545

- **PROGRESS AND PROSPECT OF LIBRARY AND INFORMATION SCIENCE EDUCATION IN BANGLADESH** 555
Lt Cdr Wares-Ul-Matin (Retd)¹ Md. Jahangir Alam²

- **LIBRARY AND INFORMATION SCIENCE EDUCATION THROUGH E-LEARNING** 558
Dr. G. Mangai¹ Dr. P. Ganesan²

- **ACADEMIC REFERENCE MANAGEMENT TOOLS FOR RESEARCH: A STUDY OF ZOTERO AND MENDELEY** 564
Rangaswamy¹ Dr. Rajendra Babu.H²

- **USE OF ELECTRONIC THESES AND DISSERTATIONS BY DOCTORAL STUDENTS IN UNIVERSITIES IN KERALA** 571
Sumith K.¹ Dr. Mohamed Haneefa K² Avani P.³

- **AN ASSESSMENT OF RESEARCH OUTPUT OF THESES AND DISSERTATIONS TO SHODHGANGA BY UNIVERSITIES OF TAMIL NADU: A STUDY** 578
Mamatha Dr Keshav

- **ANALYSIS OF RESEARCHGATE CONTRIBUTIONS OF NIRF RANKED 2019 ARCHITECTURE INSTITUTIONS IN INDIA** 583
M Prakash¹ J Arumugam²

- **E-LEARNING: DELIVERING KNOWLEDGE IN CONTEMPORARY LEARNING ENVIRONMENTS** 587
Rony Sebastian Dr. P. Muthumari

- **EMERGING TECHNOLOGIES OF SATELLITE AND MOBILE COMMUNICATION IN DISTANCE EDUCATION** 592
Dr. M.Prabakaran¹ Dr. S.Nattar²

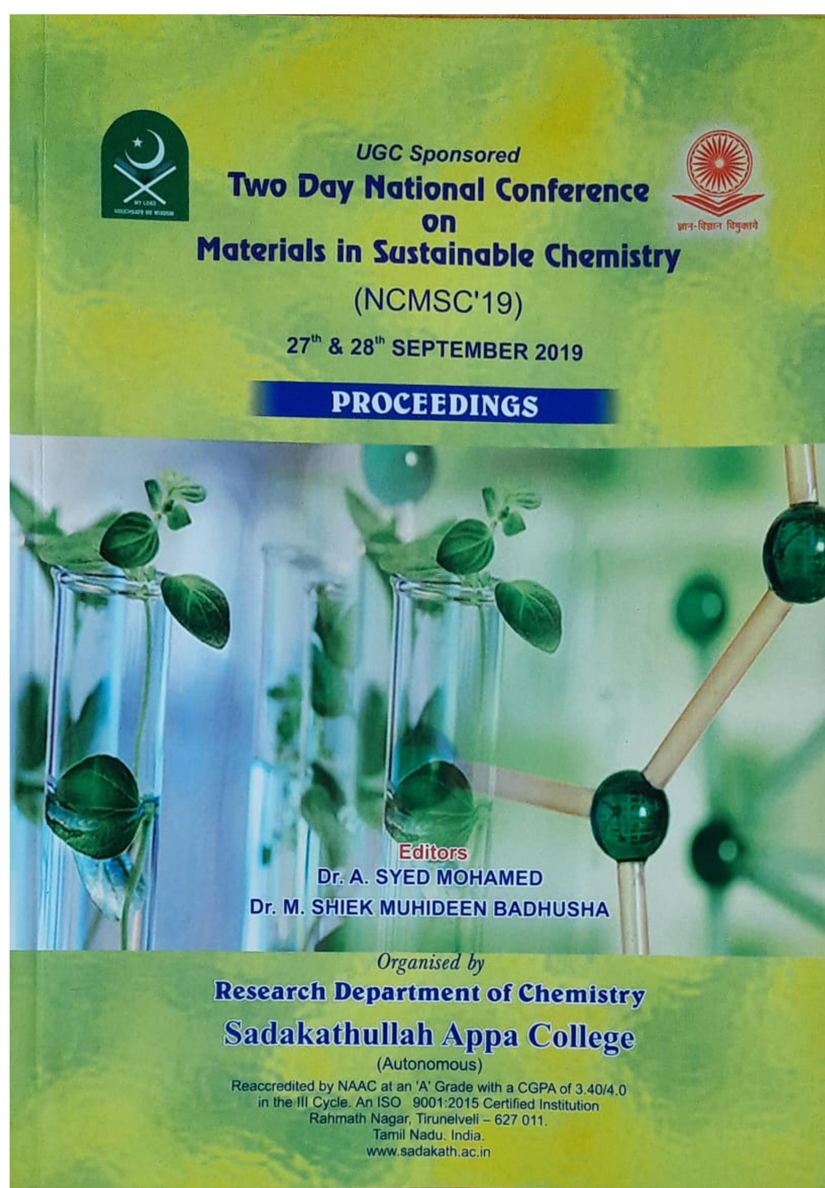
- **SWAYAM : A STUDY AMONG AFFILIATED COLLEGES OF BHARATHIYAR UNIVERSITY** 595
P. Kavitha

- **E-LEARNING AND LIBRARIES – A VIEW** 598
Preethi P¹ Dhivya Bharathi M² Thaniyalakshmi G³

- **CONTINUING EDUCATION IN LIBRARY SCIENCE EDUCATION IN INDIA: A SPECIAL REFERENCE TO ANDHRA PRADESH** 605
Dr. Md. Gouse Riajuddin

- **CHANGING THE FACE OF COLLEGE LIBRARIES INTO E-LEARNING CENTRES** 605
Dr. M. Antina Pathumaragam¹ Askar Nisha.M² Fazila Mariam.S³ Sivagami.M⁴

S.No in excel sheet	Name of the teacher	Title	ISBN/ISSN	DEPARTMENT
62	Dr. A. Syed Mohamed	National conference on Materials in Sustainable Chemistry	978-81-938054-8-0	CHEMISTRY
63	Dr. M. Sheik Muhidheen Badhusha	National conference on Materials in Sustainable Chemistry	978-81-938054-8-0	
64	Dr. Sabitha	Integrating waste management and biodiesel production from <i>Carcia papaya</i> peels	978-81-938054-8-0	



CONTENT

S.No	Content	Page No
1.	Development Of Ultra Low Cost Screen-Printed Carbon Electrode Technology For Highly Efficient Hydrogen Gas Production <i>Annamalai Senthil Kumar</i>	
2.	Proton Transfer Induced Process <i>Ila, Minati Das and G. Krishnamoorthy</i>	
3.	Carbon Nanomaterials As Alternative Candidates For Scarce Metals: Synthesis And Applications Of Graphene Based Materials <i>S. Abraham John</i>	
4.	Electrospun Nanomaterials For Dye Sensitized Solar Cells <i>A.Subramania</i>	
5.	Graphene Oxide And Its Derivatives As Sustainable Carbonaceous Catalyst For Greener Organic Transformations <i>Dr.Palaniswamy Suresh</i>	
6.	Egg white Mediated Synthesis and Structural properties of nanocrystalline Nickel ferrite Nanoparticles <i>P. Aji Udhaya, M. Meena, M. Abila Jeba Queen, T. Regin Das</i>	01
7.	Anionic surfactant catalysed oxidation of phenylsulfinylacetic acid. <i>J. Janet Sylvia Jaba Rose, R. Jeevi Esther Rathnakumari, P. Subramniam, J. Jeremy Jeba Samuel</i>	08
8.	Effect of SDS on the luminescence quenching of tris(2,2'-bipyridine) ruthenium(II) cation with p-quinones. <i>T.Sumitha Celin and G. Allen Gnana Raj*</i>	15

S.No	Content	Page No
9.	Catalytic role of oxovanadium(IV)salophen complexes in the oxidation of phenylsulfinylacetic acids by hydrogen peroxide in the presence of Picoline N-oxide <i>R. Jeevi Esther Rathnakumari, J. Janet Sylvia Jabarose, P. Subramaniam, J. Jeremy Jeba Samuel</i>	22
10.	Synthesis, optical, structural and morphological properties of Bi ₂ O ₃ nanoparticles and its photocatalytic activity <i>R. Savitha, B. Kavitha*</i>	28
11.	Corrosion protection performance of poly(o-toluidine)/metal oxide nanocomposites coating on mild steel <i>R. Rajkumar¹ and C. Vedhi²</i>	36
12.	Integrating waste management and biodiesel production from <i>Carica papaya</i> peels <i>*Dr. M. A. Sabitha, K. Poornimala</i>	54
13.	Electrochemical sensor using graphene oxide modified glassy carbon electrode for the determination of Ofloxacin <i>J. Antony Rajam and P. V. Vijaya Rani</i>	66

Integrating waste management and biodiesel production from *Carica papaya* peels

M. A. Sabitha*, K. Poornimala

PG and Research Department of Chemistry, Sadakathullah Appa College
(Autonomous), Tirunelveli.

*Corresponding author email: sabiarsh@yahoo.in

Abstract

Waste management become a great challenge in India. Most of the wastes are dumped in lands which create serious environmental threat. Vegetable and fruit wastes pose pollution problem as they are discarded onto the land. It can be efficiently used for the production of biofuel. The bioconversion of fruit wastes into biodiesel paves way to overcome the problem of disposal. The current study deals with the production of biodiesel from *Carica papaya* fruit peels and its characterization. Utilization of crude peel oil for production of bio-diesel will prevent further wastage of already existing resources and use of environmental friendly fuel will create cleaner environment. The production of biodiesels from unripe papaya peel oil by the transesterification reaction was characterized by density, viscosity, acid number test, saponification value and peroxide value. The results are compared to that of ASTM standards. The acid value and density are found to be 1.05 mg KOH/g and 0.86 kg/m³ respectively. The saponification value and peroxide value are in agreement with the ASTM standards.

Keywords: Waste management, biodiesel, *Carica papaya*, transesterification, saponification value, peroxide value.

1. Introduction:

1.1 Fruit wastes

Fruit wastes are biodegradable materials which are dumped in land [1]. The rotting of the disposed fruit wastes creates foul smell which attracts birds, flies and pigs [2]. These are vectors of various diseases. The conversion of the carbohydrate rich biomass to useful biofuel reduces the risk of diseases and provides potential path for renewable energy generation.

1.2 Characterization of fruit wastes

Fruit peels can be used for the production of energy. It can also be used as bioactive compounds, antioxidants and bioadsorbents [3]. The seed and skin of the fruits consists of polyphenols, vitamins, enzymes and oils [4]. Pectin is being extracted from different fruit wastes such as mango peel, banana peel and pumello peel. It finds application as filler in

S.No in excel sheet	Name of the Teacher	Title	ISBN/ISSN	DEPARTMENT
65	Mrs. L.S.Subbu Lakshmi	Plant Disease Detection using IOT	978-81-944509-3-1	COMPUTER SCIENCE

International Conference on Recent Trends in Multi-Disciplinary Research

Thoothukudi, Tamilnadu, 27th and 28th February, 2020

Plant Disease Detection Using IOT

Subbu Lakshmi L.S., Assistant Professor, Department of Information Technology, Sakathulath Appa College, Tiruchveli, TamilNadu, India.

Abstract:-

Agriculture is the key development of the rise in human civilization but the quality of agricultural is seriously affected by plant disease; this system is proposed to rectify the problem occurred by plant disease while in early stage of infection. Using IOT, an automated system has been developed to detect disease in leaf which improves the quality of agriculture. This paper attempts to develop an automated system that detects the presence of disease in the plants using image processing techniques and the values predicted using sensors like temperature, humidity and color parameters, the result is recognized based on variation in predicted values between infected plant leaf and healthy plant leaf.

Keywords:-

Agriculture, Disease, Sensors.

27th & 28th February, 2020

ICKTMDR -2020

ISBN: 978-81-944509-3-1

Organized by
The Internal Quality Assurance Cell (IQAC)
A.P.C.Mahalaxmi College for women, Thoothukudi, Tamilnadu

Page | 8

S.No in Excel sheet	Name of the teacher	Title	ISBN/ISSN	DEPARTMENT
66	Dr.M.Manohar	Potential Binding Efficiency of Antiviral Drug Loinavir Targetted to the Catalytic dyad, HIS41-CYSI45 of SARS COV-2 main Protease	978-935-407-3380	MICROBIOLOGY

Genes Magazine

reported research articles. Methodologies were focused on 1,8-Cineole anti-inflammatory property, gastroprotective mechanism, anti-microbial property, Anti-proliferative and Hepatoprotective mechanism. The present review aims to summarize and consolidate the biological properties of 1,8-Cineole.

Keywords: 1,8-cineole, herbal medicine, pharmacological bio-activities.

POTENTIAL BINDING EFFICIENCY OF ANTIVIRAL DRUG LOPINAVIR TARGETED TO THE CATALYTIC DYAD, HIS41 -CYS145 OF SARS COV -2 MAIN PROTEASE

S.Muthu Raj, M.Manohar, M.Mohan

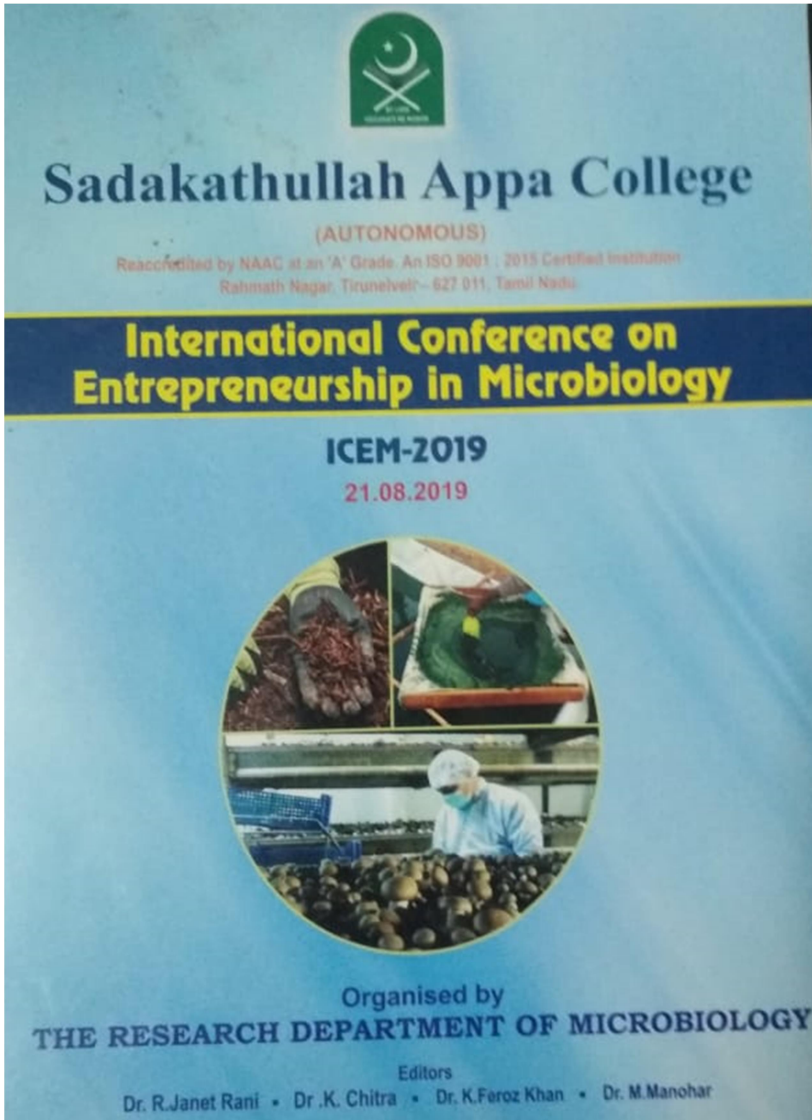
¹Department of Microbiology, Sadakathullah Appa College (Autonomous), Tamilnadu, India


² Department of Chemistry, Mahendra Engineering College, Tamilnadu, India
E mail.mohanrtt@gmail.com

The spread of SARS CoV 2 across the globe rushed the scientific community to find out the potential inhibitor for controlling the viral disease. The main protease (Mpro) or Chymotrypsin protease (3CLpro) involved in the cleavage of pp1a, duplication of intracellular materials and release of nonstructural proteins. Cys-His catalytic dyad is located in the SARS-CoVMpro which is the substrate-binding site located in domains I and II. There are many approved drugs that have their active protease inhibition capability. The targeting of the active site of the main protease is the better option to fight against the viral population. Lopinavir, ritonavir, Remdesivir and Chloroquine are some of the drug candidates considered to be involved in the treatment of SARS CoV 2 under emergency situation as a trial basis. In the present investigation we used lopinavir as a drug to bind the catalytic dyad His41, Cys145 of main protease. The minimum binding of energy of -11.45 kcal/mol observed with the binding of Cys145 and -10.93 kcal/mol was noted with the residue His41. The inhibition constant was also found to be relevant to the binding efficiency of the drug. This is considered to be a model drug target which is initiating the finding of many new drugs to target the current outbreak created by the virus SARS-CoV-2.

23

S.No in excel sheet	Name of the teacher	Title	ISBN/ISSN	DEPARTMENT
67	Dr.M.I. Zahir Hussain	Comparative Study on the growth and Yield performance of <i>Pleurotus ostreatus</i> (Oyster Mushroom) using difference substrates	978-81-938054-9-7	ZOOLOGY
68	Dr. J.ShifaVanmathi	Comparative Study on the growth and Yield performance of <i>Pleurotus ostreatus</i> (Oyster Mushroom) using difference substrates	978-81-938054-9-7	
69	Dr.M.I. Zahir Hussain	Assessment of Antimicrobial activity of Sipder web against Human Pathogen	978-81-938054-9-7	
70	Dr.M.I. Zahir Hussain	In-vitro Antimicrobial effects of vegetable extract against pathogenic microorganisms	978-81-938054-9-7	




Sadakathullah Appa College
 (AUTONOMOUS)
 Reaccredited by NAAC at an 'A' Grade. An ISO 9001 : 2015 Certified Institution
 Rahmath Nagar, Tirunelveli - 627 011, Tamil Nadu.

**International Conference on
 Entrepreneurship in Microbiology**

ICEM-2019
 21.08.2019

Organised by
THE RESEARCH DEPARTMENT OF MICROBIOLOGY

Editors
 Dr. R. Janet Rani • Dr. K. Chitra • Dr. K. Feroz Khan • Dr. M. Manohar



Sadakathullah Appa College

(Autonomous)

- Reaccredited by NACC at an 'A' Grade ISO 9001:2015 Certified Institution
- Rahmath Nagar, Tirunelveli - 627 011.

INTERNATIONAL CONFERENCE ON ENTREPRENEURSHIP OF MICROBIOLOGY

(ICEM-2019)

21 AUGUST, 2019

Organised by

PG & RESEARCH DEPARTMENT OF MICROBIOLOGY
(Unaided)

Editors

Dr. R. Janet Rani
Dr. K. Chitra
Dr. K. Feroz Khan
Dr. M. Manokar

PROCEEDINGS

e-mail : principal@sadakath.ac.in
Website : www.sadakath.ac.in
Phone : 0462-2540763

Comparative study on the growth and yield performance of *Pleurotus ostreatus* (Oyster mushroom) using different substrates

Dr.J.Shifa Vannathi¹, Dr. D.V.Sheeba Rajakumari² and Dr.M.I. Zahir Hussain³

1. Assistant professor, PG Department of Zoology, Sadakathullah Appa College, Rahmath Nagar, Tirunelveli
2. Assistant professor, PG and Research Department of Zoology, St.John's College, Palayamkottai, Tirunelveli
3. Assistant professor, Department of Zoology, Sadakathullah Appa College, Rahmath Nagar, Tirunelveli

Abstract

Oyster mushroom (*Pleurotus sp*) is being cultivated almost in all parts of Tamil Nadu by using paddy straw and other agricultural wastes. Therefore, in this present investigation attempts were made to grow mushroom on paddy straw and saw dust substrate. The present study was conducted in the laboratory as well as in mushroom house to determine the effect of different substrates (paddy straw and saw dust) on growth and production of oyster mushroom (*Pleurotus ostreatus*) as well as to find out the better substrate for mushroom cultivation. Spawn was prepared on sorghum grains. Paddy straw and saw dust spawned with *P.ostreatus* were examined for spawn running (mycelia development), pin head formation, stalk length, pileus diameter, mean yield and biological efficiency. The experiment was setup a complete randomized design with three replicate. The maximum stalk length was recorded in paddy straw treatment (5.93 ± 1.09 , 5.31 ± 0.51 and 5.64 ± 0.23 cm) in three flushes when compared to saw dust treatment (5.73 ± 1.56 , 5.65 ± 0.23 and 5.07 ± 0.76 cm). The pileus diameter was highest recorded in paddy straw treatment (4.87 ± 0.31 cm) followed by saw dust treatment (3.90 ± 0.49 cm). Spawn running took less time i.e. 18 days on paddy straw as compared to saw dust (20 days). The appearance of pinhead and their maturity also took less time i.e. 16 days and 9 days, respectively on paddy straw. The highest number of effective fruiting bodies were found in paddy straw treatment (23) when compared to saw dust treatment (16). Maximum yield i.e. 101.9 gm was recorded on paddy which was much higher than saw dust (65.83gm). The first flush gave the maximum yield in all treatments and there was a progressive decrease in the yield of successive flushes. The maximum biological efficiency of 2.11% was observed in case of paddy straw. It concluded through our present study, paddy straw was found most suitable substrate for mushroom cultivation. The spawn running, appearance and maturity of pinheads were

Assessment of Antimicrobial Activity of Spider Web against Human Pathogens

*Zahir Hussain.M.I, **Raja pavithra.P, **Sindduja.M, **Marivignesh.R and **Shri Priya.M.

*Assistant Professor, **B.Sc. Zoology, ***Research Scholar, Department of Zoology, Sadakathulla Appa College (Autonomous), Tirunelveli-11

Abstract

The dependence of humans on other animals is inevitable. Spiders are mysterious and their silks are beneficial especially in the field of medical research. Spider silk is one of the strongest and versatile materials. Spider silk have been used by humans for several years for many purposes from stopping bleeding to fishing lines. Spider silk have also been used as topical bandages by the ancient people as they are believed to possess antiseptic properties. Some microorganisms are evolving as multidrug resistant strains and offer resistant to a variety of different antimicrobial agents. Considering the advent of many new diseases there is an urge to develop new antimicrobial agents. In this study, the antimicrobial activities of the Cellar spider *Pholcus phalangioides* against some human pathogens were studied.

Keywords: *Pholcus phalangioides*, Spider web extract, disc diffusion method, antimicrobial properties.

Introduction

Cellar spiders, Pholcidae, are familiar to most of us; though they are often confused with the similar-looking harvestman (both are called daddy longlegs). Both have enormously long legs and a tiny body; however, the harvestman - with only two 3 pairs of eyes - is not a true spider, and is found mainly outdoors under rocks and logs. Cellar spiders are abundant in human dwellings, usually seen hanging upside down in their web (Roberts,1995). They have messy webs with no structure, often built in corners of cellars or basements, utility rooms, stairwells, or other underutilized rooms (Mishra et al.,2007). When disturbed, the adult spider will cause the web to vibrate which helps to deter predators. Cellar spiders are equipped with relatively small fangs; however, there is no documentation supporting the myth that they cannot bite humans. They are accomplished predators, and will feed on most any type of arthropod that gets caught in their web (including their next of kin when pickings are slim). In traditional

S.No in excel sheet	Name of the teacher	Title	ISBN/ISSN	DEPARTMENT
73	Dr.M.I. Zahir Hussain	In-vitro Antimicrobial effects of vegetable extract against pathogenic microorganisms	978-81-938054-9-7	ZOOLOGY

(ICEMSAC-2019),
Sadakathullah Appa College, Tirunelveli

In -vitro Antimicrobial Effects of Vegetable Extract against Pathogenic Microorganisms

*Zahir Hussain.M.I, **Fathima Ranya, M. **Sindduja.M, **Marivignesh.R and **Shri Priya.M.

*Assistant Professor, **B.Sc. Zoology, ***Research Scholar, Department of Zoology, Sadakathulla Appa College (Autonomous), Tirunelveli-11

Abstract

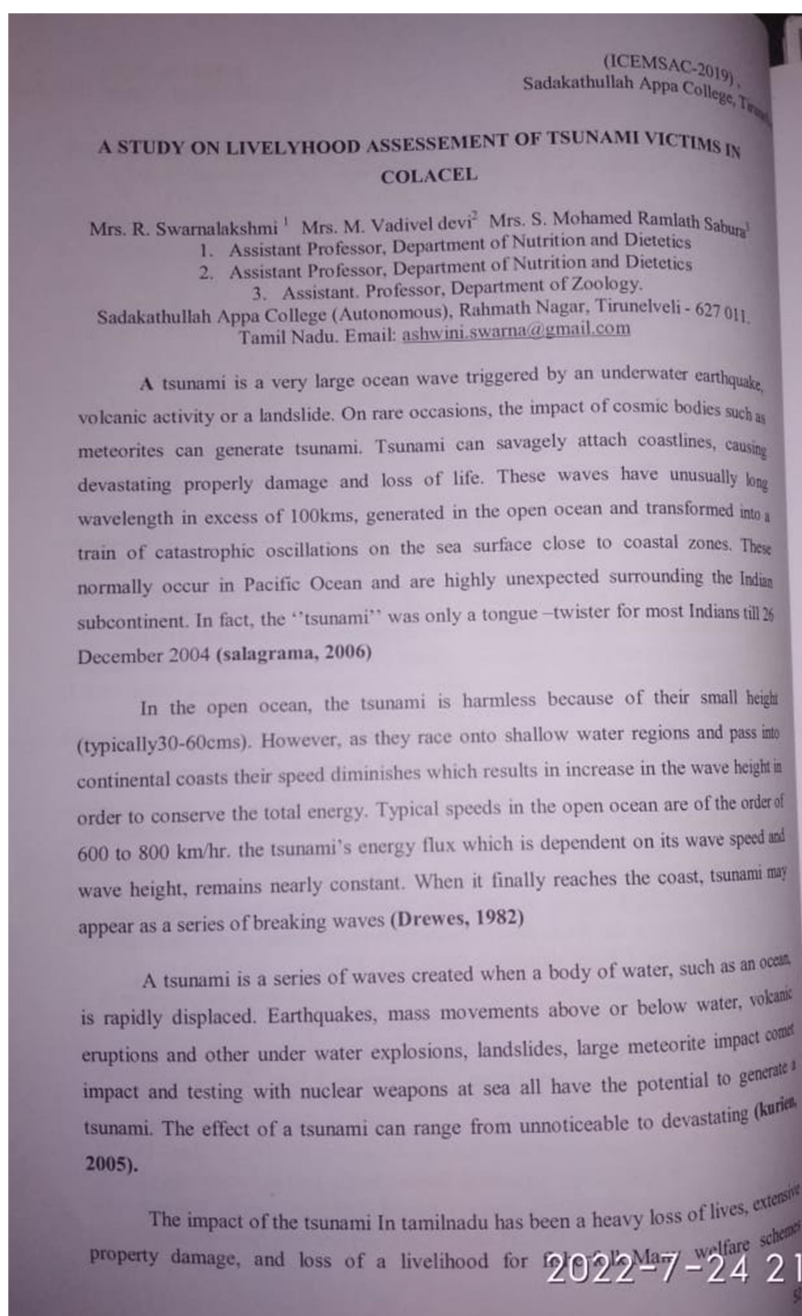
The exploitation of plants by man for the treatment of diseases has been in practice for a very long time. Herbal drugs constitute a major part in all the traditional system of medicine. It is fight to against emerging and re-emerging infectious diseases. Consuming vegetables also play a vital role against microorganism and showed antibacterial activity. The bioactive compounds like Alkaloids, Flavonoids, Tannis and phenolic compounds which present in the vegetable had actibacterial activity. The present study aimed to study the antibacterial effects of *Solanum tuberosum* (potato), *Vicia faba* (flat beans), *Solanum melongena* (Brinjal), *Abelmoschus esculentus* (lady's finger), *Momardica charantia* (Bitter gourd) extract of various solvents against pathogenic microorganisms. The maximum antibacterial activities of different extract of selected vegetables were analyzed against pathogenic microorganism. Disc diffusion method has been used to determine the antimicrobial activities of different plant extract against Gram positive (*Streptococcus pyrogenes* and *Staphylococcus aureus*) Gram negative (*Klebsiella pneumonia*, *Escherichia coli* and *Salmonella typhi*). The highest antibacterial activity was observed against *K. pneumoniae*, *S. typhi*, *S.pyrogenes*, *S. aureus* and *E.coli*, by various extracts of *Vicia faba* (Flat Beans), *Solanum melongena* (Brinjal), *Abelmoschus esculentus* (Lady's Finger), *Momardica charantia* (Bitter Gourd) respectively.

Keywords: Vegetables extract, Antibacterial activity, Disc diffusion, Pathogenic microorganisms.

Introduction

A special feature of plants is their capacity to produce a large number of organic chemicals of high structural diversity, the so called secondary metabolites (Castello et al., 2002). Screening of compounds obtained from plants for their pharmacological assay has indeed been the vast source of innumerable therapeutic agents representing molecular diversity engineered by nature (Higa et al., 1994). It is therefore necessary and urgent to fight against emerging and re-emerging infectious diseases with a view to discover and invent new agents of greater therapeutic profile to mitigate frequent outbreaks of diseases which has posed a new threat to global health security. Further,

S.No in excel sheet	Name of the teacher	Title	ISBN/ISSN	DEPARTMENT
74	Dr. Mohamed RamlathSabura	A study of livelyhood assessment of tsunami victims in Colacel	978-81-939054-9-7	ZOOLOGY
75	Dr. Mohamed RamlathSabura	Kokum (Garcinia indica) and its functional components as related to the human health	978-81-939054-9-7	



52% and the Phenolic content - 46%. The product was packed in two box packaging and Aluminum foil packaging. The microbial content for the prepared product there was no bacterial or any microbial organisms found. It can be concluded from the study Antioxidant rich chocolate was rich in nutrients especially the protein, fat, fibre and antioxidant in the formulated product which helps to repair the damaged cells of cancer patients. This chocolate can also be used to treat the other immune disorder apart from cancer. It is easy to reach a mass as chocolate is one of the favourite food among all population which help to increase the immune power.

KOKUM (*GARCINIA INDICA*) AND ITS FUNCTIONAL COMPONENTS AS RELATED TO THE HUMAN HEALTH

Mrs. R. Swarnalakshmi¹ Mrs.M.Vadivel Devi² and Mrs. S. Mohamed Ramlath Sabura³

1. Assistant Professor, Department of Nutrition and Dietetics

2. Assistant Professor, Department of Nutrition and Dietetics

3. Assistant. Professor, Department of Zoology.

Sadakathullah Appa College (Autonomous), Rahmath Nagar, Tirunelveli - 627 011, Tamil Nadu.

Email: ashwini.swarna@gmail.com

Abstract

Kokum (*Garcinia Indica choisy*) is a seasonal fruit and also only available in southern parts of Western Ghats. Kokum is a fruit tree of culinary, pharmaceutical, nutraceuticals and industrial uses. Kokum has a long history in Ayurvedic medicine. The Ayurvedic palate covers six different tastes: sweet, salty, pungent, bitter, astringent and sour. as it was traditionally used to treat sores, dermatitis, diarrhea, dysentery, ear infection, and to facilitate digestion. Kokum seeds are used for oil extraction. That oil is called kokum butter and used in curries, cosmetics, medicines, and costly confectionery preparations. The kokum fruit acts as an anti-oxidant, acidulant and appetite stimulant and helps in fight cancer, paralysis and cholesterol. The kokum fruit is a good digestive tonic and used to improve skin health. Another major active ingredient in kokum is Garcinol it acts as an antioxidant, anti-inflammatory, anti-bacteria and anti-carcinogenic agent. Different varieties of recipes like cocktails, fruit syrup were formulated and sensory analyzed. The aim of this review was to present an overview of the functional, medicinal and physiological properties of the kokum fruit.

Key words: Kokum, Hydroxyl citric acid, Functional food, Anthocyanins,

RHIZOBIAL BIOFERTILIZER

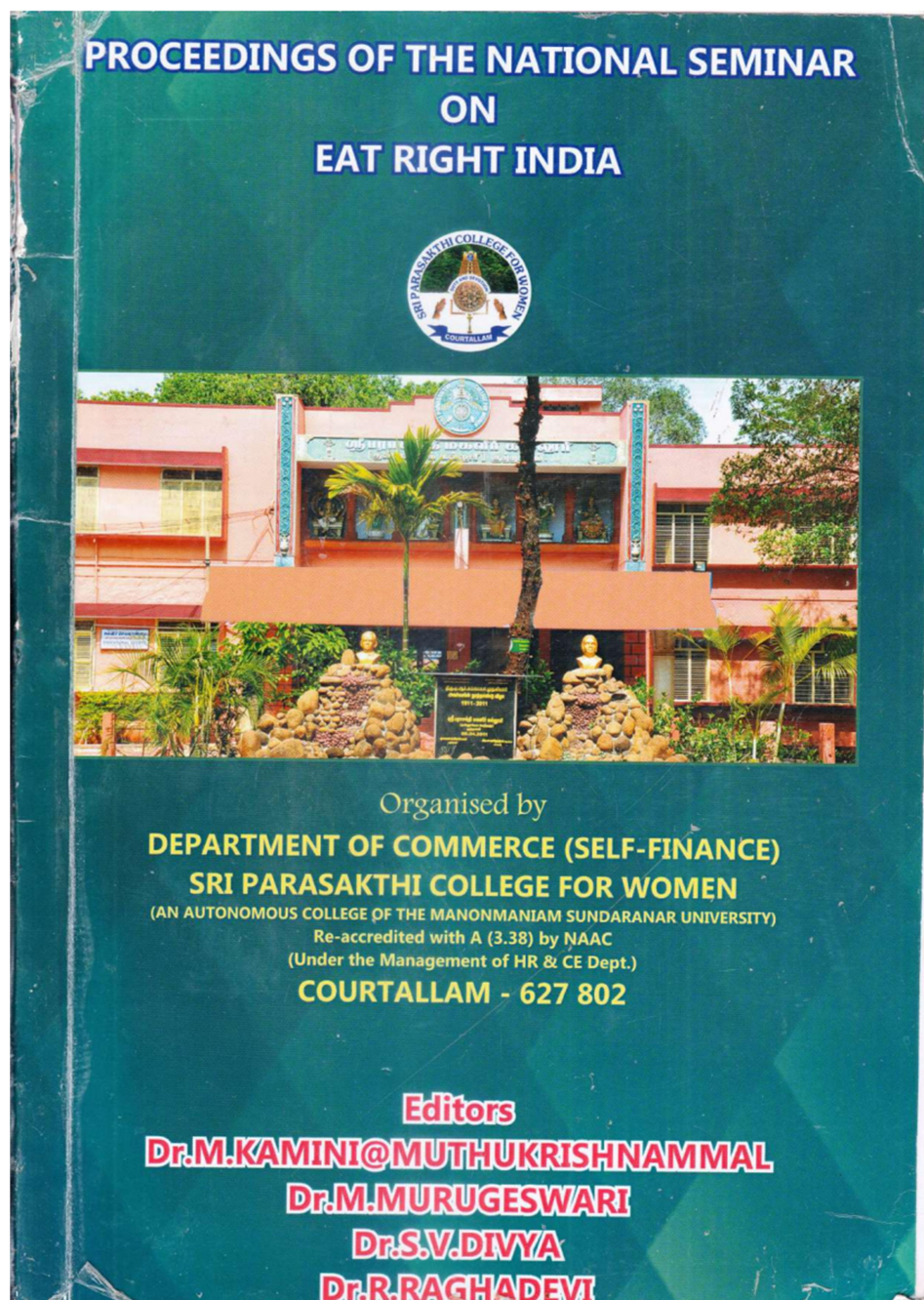
Malarvizhi 2nd M Sc Microbiology

Kamaraj College Tuticorin-3

Abstract :

Biofertilizers are the substance which make the soil rich with nutrient by using micro organisms. They increase the plant productivity. They are cost effective and environment

S.No in excel sheet	Name of the teacher	Title	ISBN/ISSN	DEPARTMENT
73	Mohamed RamlathSabura	Habitual disease-Dental caries- Budding issue	9789354066351	ZOOLOGY
74	Dr.M.I. Delighta Mano Joyce	Habitual disease-Dental caries- Budding issue	9789354066351	



Eat Right India

© Editors. All Rights Reserved

ISBN: 978-93-5406-635-1

First Published – December, 2020

Disclaimer

The authors are solely responsible for the contents of the papers in this proceedings. The editors do not take any responsibility for the same in any manner.

Published by

Department of Commerce (Self-Finance),
Sri Parasakthi College for Women, Courtallam – 627802.

Printed at

Yashica Computers & Printers,
Kadayanallur.

THE HABITUAL DISEASE - DENTAL CARIES: A BUDDING ISSUE**S. MOHAMED RAMLATH SABURA¹, S.MUTHALAGI²****M.I. DELIGHTA MANO JOYCE³**^{1,3}Assistant Professors, Department of Zoology, Sadakathullah Appa College, Tirunelveli²Assistant Professor, PG and Research Department of Zoology,
Thiru Kolanjiappar Government Arts College, Virudhachalam.**INTRODUCTION**

Children are prone to various diseases based on their way of living and eating habits. They are escapable and can be lowered with changes in diet and other habits. Lifestyle diseases characterize those diseases whose occurrence is primarily based on daily habits of people and are a result of an inappropriate relationship of people with their environment. The onset of these habitual diseases is insidious, they take years to develop and once met they do not lend themselves easily to cure. Main factors causing the lifestyle diseases include mainly bad food habits. Predisposed certain diseases such as diabetes, dental caries and asthma, appear at greater rates in young populations living in the “western” way; their increased incidence is not related to age, so the terms cannot accurately be used interchangeably for all diseases (Pollan, Michael, 2008).

Dental caries in children remains a significant public health problem. It is a disease with multi-factorial causes. India is one of the largest countries in the world, covering 1/7th of the total area of the world. Being a developing country, it is struggling to eradicate many diseases. There are growing evidences that general health conditions have enormous negative impact on the quality of healthy life. There exists significant difference between the health care services provided or available at village level and the cities. The rural India has been the most neglected due to the financial constraint and lack of education.

Dental caries has been a highly prevalent and costly disease in the world, representing the most common infectious disease in the pediatric population. (Vargas, 1998). The aim of present study was to assess the prevalence of dental caries due to the consumption of Chocolates and candies among 5 to 16 years old selected school going children in Tirunelveli district. This is an empirical study conducted in a selected area namely Tirunelveli district, based purely on primary data.

The determinants of dental caries are many and complex. Positive oral health attitudes and behaviors have been associated with decreased caries prevalence.

METHODOLOGY

The present study was undertaken to explore and understand possible relationship between prevalence of dental caries among 5-16 year-old children and their association with habitual factors. The study was carried out in Tirunelveli district which is subdivided into eleven taluks namely, Nanguneri, Palayamkottai, Sankarankoil, Tirunelveli, Tenkasi, Radhapuram, Ambasamudram, Shenkottai, Alangulam, Sivagiri and V.K. Pudur.

A total number of 1100 students were selected, 100 students from each Taluk, including 535 boys and 565 girls within the age group of 5-16 years old. They were randomly selected.

S.No in excel sheet	Name of the teacher	Title	ISBN/ISSN	DEPARTMENT
75	Mohamed RamlathSabura	NPK analysisof vermicomposting using different weeds and cow wastes	978-81-942482-0-0	ZOOLOGY
76	Dr.M.I. Delighta Mano Joyce	NPK analysisof vermicomposting using different weeds and cow wastes	978-81-942482-0-0	



NPK ANALYSIS OF VERMICOMPOSTING USING DIFFERENT WEEDS AND COW WASTES

S. Mohamed Ramlath Sabura, M.I. Delighta Mano Joyce* and Sheik**

Assistant Professor, Department of Zoology, Sadakathullah Appa College, Tirunelveli

*Assistant Professor, PG & Research Department of Zoology,
Sadakathullah Appa College, Tirunelveli

**Scholar, Sadakathullah Appa College, Tirunelveli.

ABSTRACT

Vermicomposting is considered as one of the best techniques for solid biomass waste management especially cattle wastes. A 3×3 factorial experiment was performed in vermitubs to test the efficiency of vermicomposting in different bedding materials (Factor A) and worm food source (Factor B) and substrate (Factor C). Factor A levels were coconut husk, Factor B was composed of cattle manure, Factor C *Sargassum*, *Eichornia* and grass (*Digitaria*) were used as bedding materials. The bedding was put on the base of bin and sprays with water to moist the bedding. Highest sodium in S3 (CD-E) contains 1366.0, Highest phosphorous in S1 (CD-G) which contains 54.7.8 and Highest potassium in S3 (CD-E) contains 1100.00. Vermicomposting can be used to promote sustainable cattle manure management. Vermicomposts are excellent sources of biofertiliser and can also be used as raw materials for bioindustries.

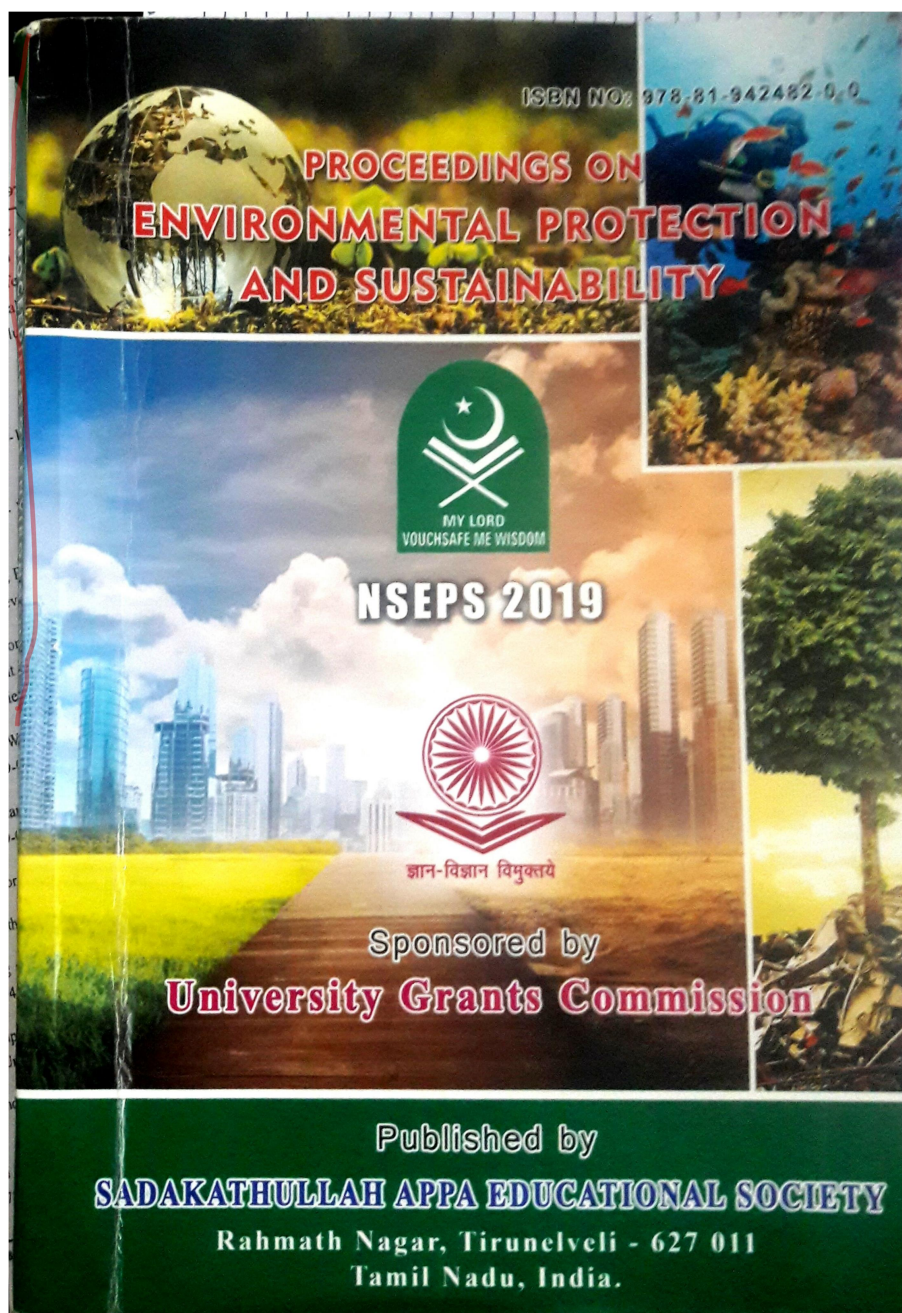
Key words: Vermicompost, *Sargassum*, *Eichornia*, *Digitaria*, biofertilizer.

Introduction

In India approximately 62 million tonnes of garbage is thrown out daily, out of which only 18 million tonnes is treated. These are shocking results for a nation like India. This untreated waste is then disposed by the municipality corporations which then lead to health issues and environmental degradation. With rapid urbanization, industrialization and population explosion in India, solid waste management will be a key challenge for state governments and local municipal bodies in the 21st century.

Urban India (about 377 million people) generates 62 million tonnes of municipal solid waste each year, of this about 43 million tonnes (70%) is collected and 11.9 million tonnes (20%) is treated. About 31 million tonnes (50%) is dumped in landfill sites. (1,2) With changing consumption patterns and rapid economic growth it is estimated that urban municipal solid waste generation will increase to 165 million tonnes in 2030. (3,4,5,6)

S.No in excel sheet	Name of the teacher	Title	ISBN/ISSN	DEPARTMENT
77	Dr. J.ShifaVanmathi	Efficiency of vermicompost on the growth and yield of <i>Cyamopsis tetragonoloba</i>	978-81-942482-0-0	ZOOLOGY
78	Dr.M.I. Delighta Mano Joyce	Efficiency of vermicompost on the growth and yield of <i>Cyamopsis tetragonoloba</i>	978-81-942482-0-0	
79	Dr. S. Peer Muhammed	Efficiency of vermicompost on the growth and yield of <i>Cyamopsis tetragonoloba</i>	978-81-942482-0-0	



NSEPS/2019/OP/22

**EFFICIENCY OF VERMICOMPOST ON THE GROWTH AND YIELD OF
CYAMOPSIS TETRAGONOLOBA**

**Dr. J.Shifa Vanmathi,¹ Dr. V.Lakshmi,² Dr. M.I. Delights Mano Joyce,³
Dr.S. Peer Mohamed⁴**

¹Assistant professor, PG Department of Zoology, Sadakathullah Appa College,
Affiliated to Manonmaniam Sundaranar University,
Rahmathnagar, Tirunelveli-11, Tamilnadu.

²Assistant Professor, PG and Research Department of Zoology,
Pasumpon Muthuramalinga Thevar College, Melacelithanallur, Tirunelveli-627953.

³Assistant professor, PG Department of Zoology, Sadakathullah Appa College,
Rahmathnagar, Tirunelveli-11.

⁴Assistant professor, Department of Zoology, Sadakathullah Appa College,
Rahmathnagar, Tirunelveli-11.

ABSTRACT

The experiment was conducted to evaluate the effect of vermicompost, farmyard manure and inorganic fertilizer on the growth and yield of the vegetable plant, *Cyamopsis tetragonoloba*. The germination percentage, shoot length, no.of flowers, no.of.buds formation and yield of the plant were recorded on 20th, 40th, 60th and 80th days. The influence of vermicompost was significant on germination percentage of 63% compared to the control(40%).Among the different treatments tried, there were significant of compost manure responded the highest plant height ($47 \pm 7.92\text{cm}$) followed by farmyard manure when compared to inorganic fertilizer (14.12 ± 1.04). The maximum number of bud formation was observed in treatment 1(vermicompost) 12.23 ± 14.13 . Number of flowers per plant and were significantly influenced by 3.17 ± 3.65 , 1.87 ± 2.17 and 0.50 ± 2.02 respectively compared to control(0.83 ± 0.96). The maximum yield was also noticed in compost treatment ranged from 50th to 80th day.Three replications were maintained in each treatment. The maximum growth and yield of *Cyamopsis tetragonoloba* was found in vermicompost treatment followed by farmyard manure, urea and lowest in control. It is also suggested that vermicompost is more favourable for better yield of *Cyamopsis tetragonoloba* plant and maintenance of soil environment and it can be economically and also environmentally suitable.

Keywords: Vermicompost, inorganic fertilizer, *Cyamopsis tetragonoloba*, growth and yield

1. Introduction:

The production of degradable organic waste and its safe disposal becomes the current global problem. Provision of a sustainable environment in the soil by amending

Department of Zoology & Botany, Sadakathullah Appa College, Tirunelveli - 627 011.

145




PRINCIPAL
SADAKATHULLAH APPA COLLEGE
Rahmath Nagar, TIRUNELVELI - 627 011.