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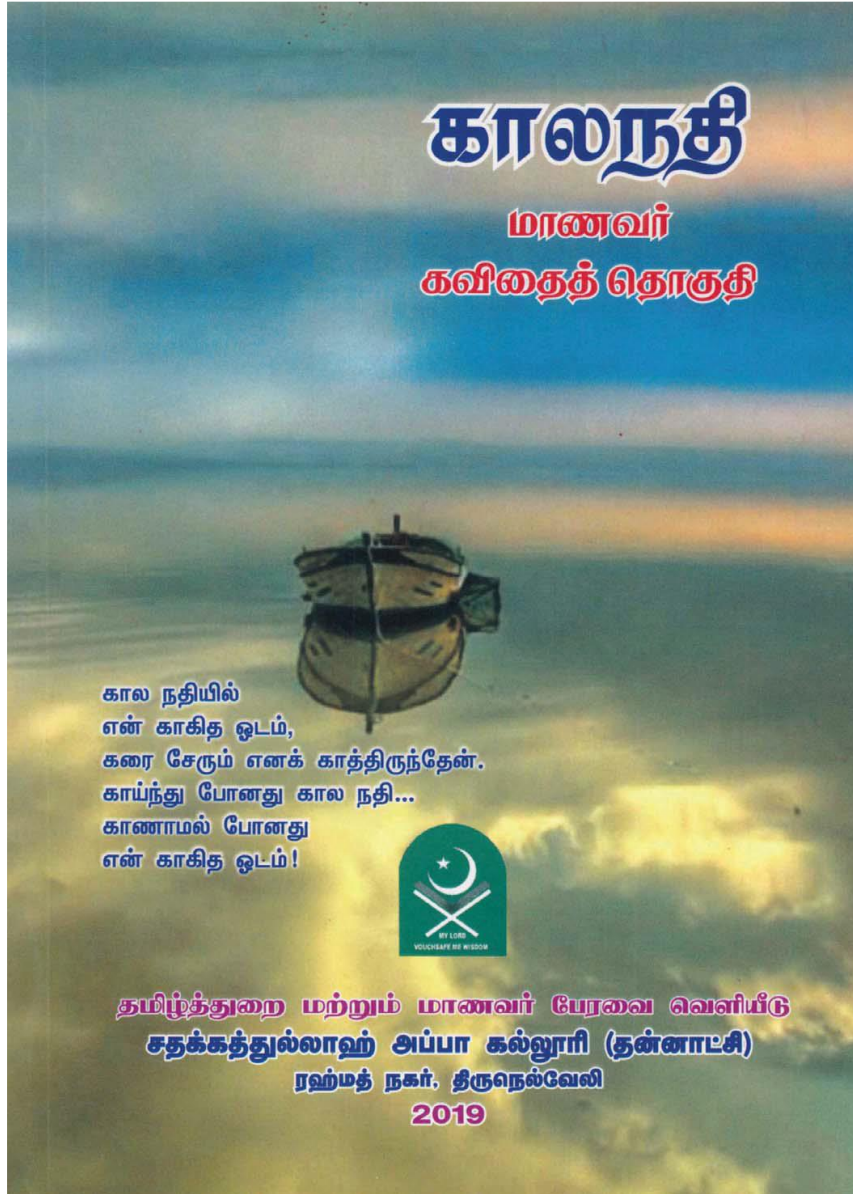
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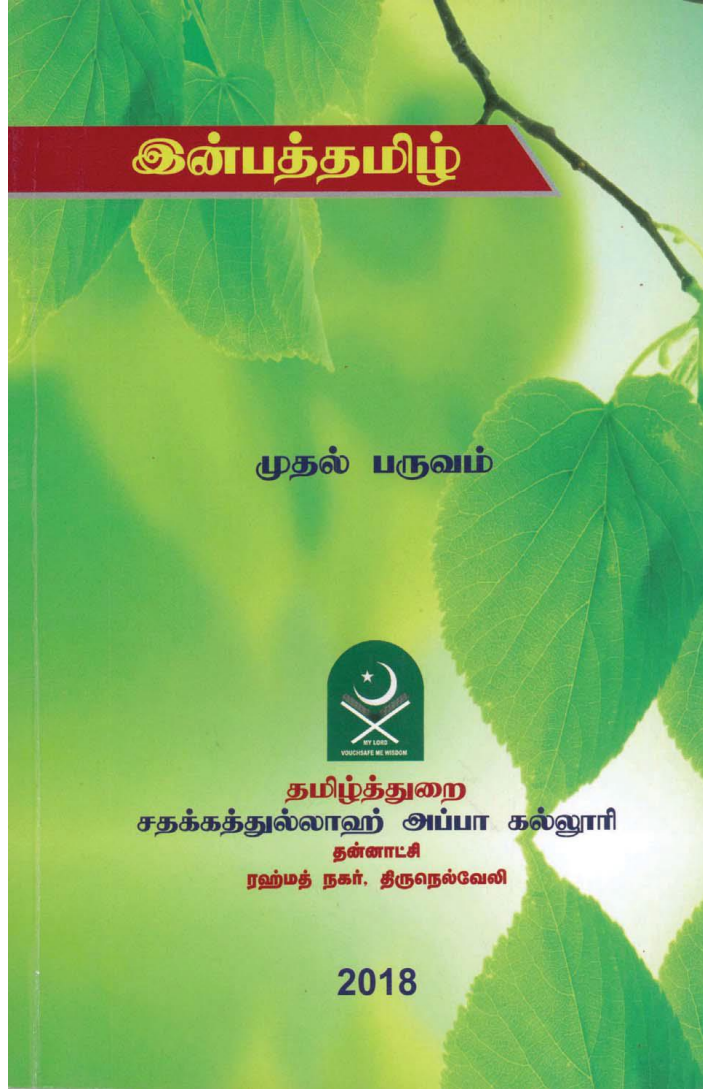
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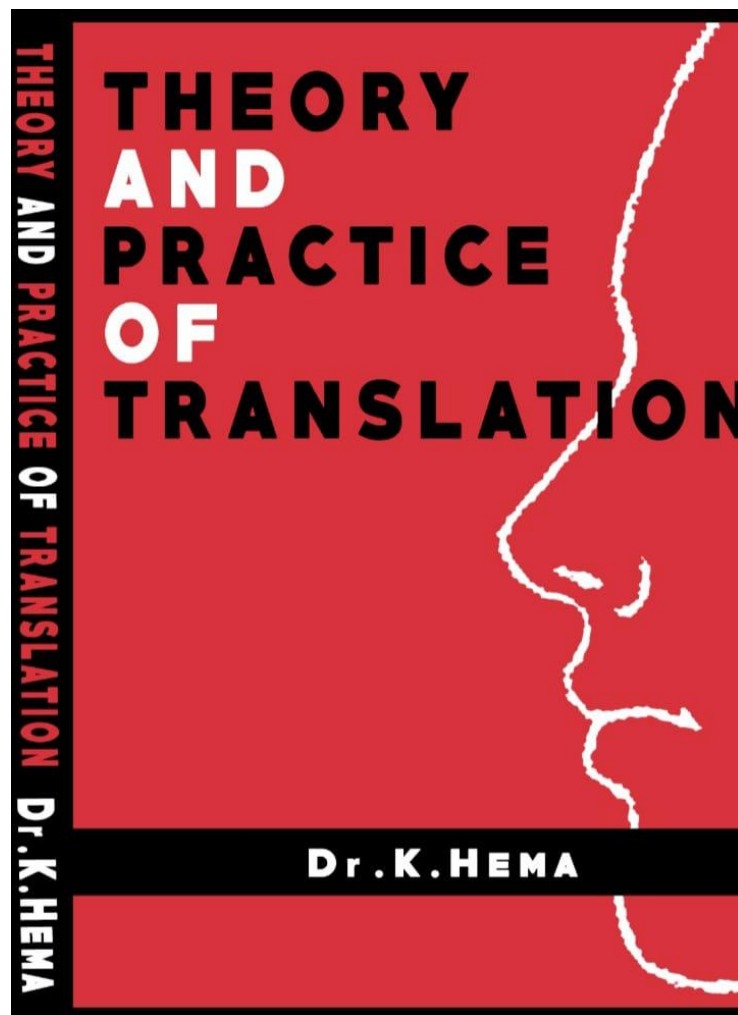


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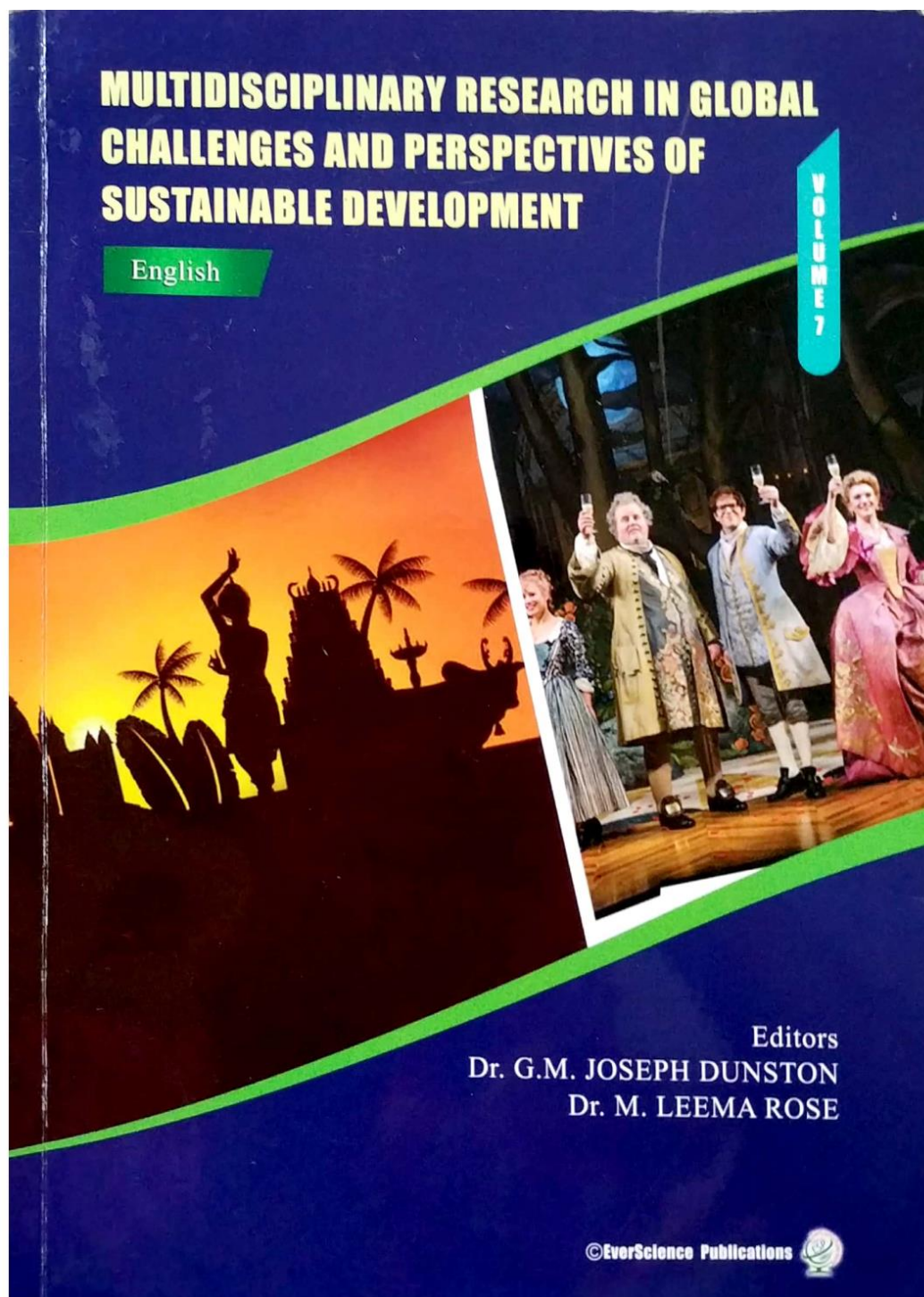
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The Discourse of Power in Marmaduke Pickthall's *Said the Fisherman*

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Abstract

Life is full of opportunities juxtaposed with hurdles and complications. One must be conscious enough to make proper use of accessible space combining the formulation of Foucault with regard to space, power and knowledge so as to determine their luck or fate. This paper presents the overview of how the above conception of Foucault got binded one with that of the roving life of Said in Muhammad Marmaduke Pickthall's *Said the Fisherman*.

Keywords: opportunities, space, power, knowledge, luck, fate, etc.

Marmaduke Pickthall's *Said the Fisherman* was divided into two parts namely 'The Book of His Luck' and 'The Book of His Fate'. The former consisted of twenty eight chapters and the latter had seventeen. This novel was published in 1903. The first part opened up the idea of luck in the life of the protagonist, Said. After a series of struggles, he could taste wealth, riches, recognition and also a good friendship. Even he could take pride in inheriting the treasure of the old beggar, Mustafa, who indeed adopted him as his son for a reason. There were instances of fate that fell upon Said, but a very rare luck of inheritance and a true friend who also served as a servant were the extraordinariness in the life of the wretched fisherman.

David Lee Carlson made an analytical approach on Foucault's concept of Space correlating Eribson's in his *Foucault Studies*. Eribson mentioned in *Michel Foucault* that the *Groupe d'Information sur les Prisons* (GIP) represented a new "intellectual engagement that focused on the "realities that have gone unnoticed, showing what is intolerable and what it is in an intolerable situation that makes it truly intolerable" (Lee Carlson 109). In case of Pickthall's protagonist in *Said the Fisherman*, the reason behind what made an intolerable situation truly in tolerable became the stimuli to lead a nomadic life for Said.

Said was once the fisherman, who prayed and earned as well. Ill-omen fell on him as he imagined of owning a coffee-house, leaving his fishing business, the boat, net, etc. to his friend Abdullah and would spit on his face as a sign of pride. Pickthall had made this incident naturalistic as:

...to make up the price of the coffee-house he had it in his mind to buy. Then he would leave the fishing business to Abdullah, his friend and partner, and customers would know him thenceforth as Said Effendi. That was but the first step in the path of his ambition. Presently he would be a Bey—an Emir, perhaps. He would lie all day upon cushioned



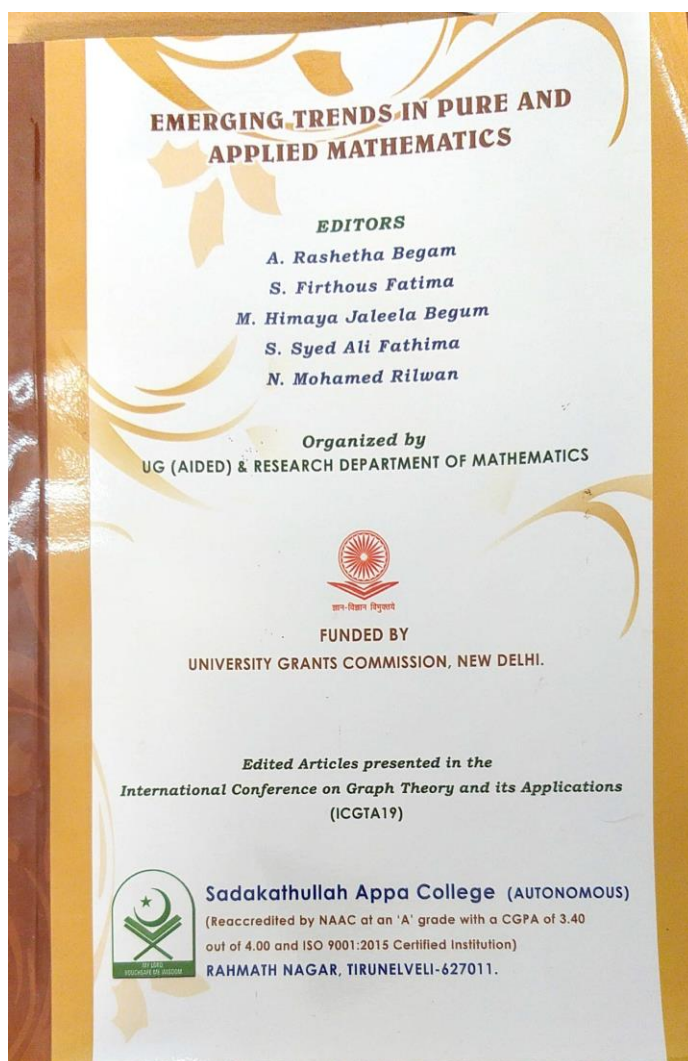
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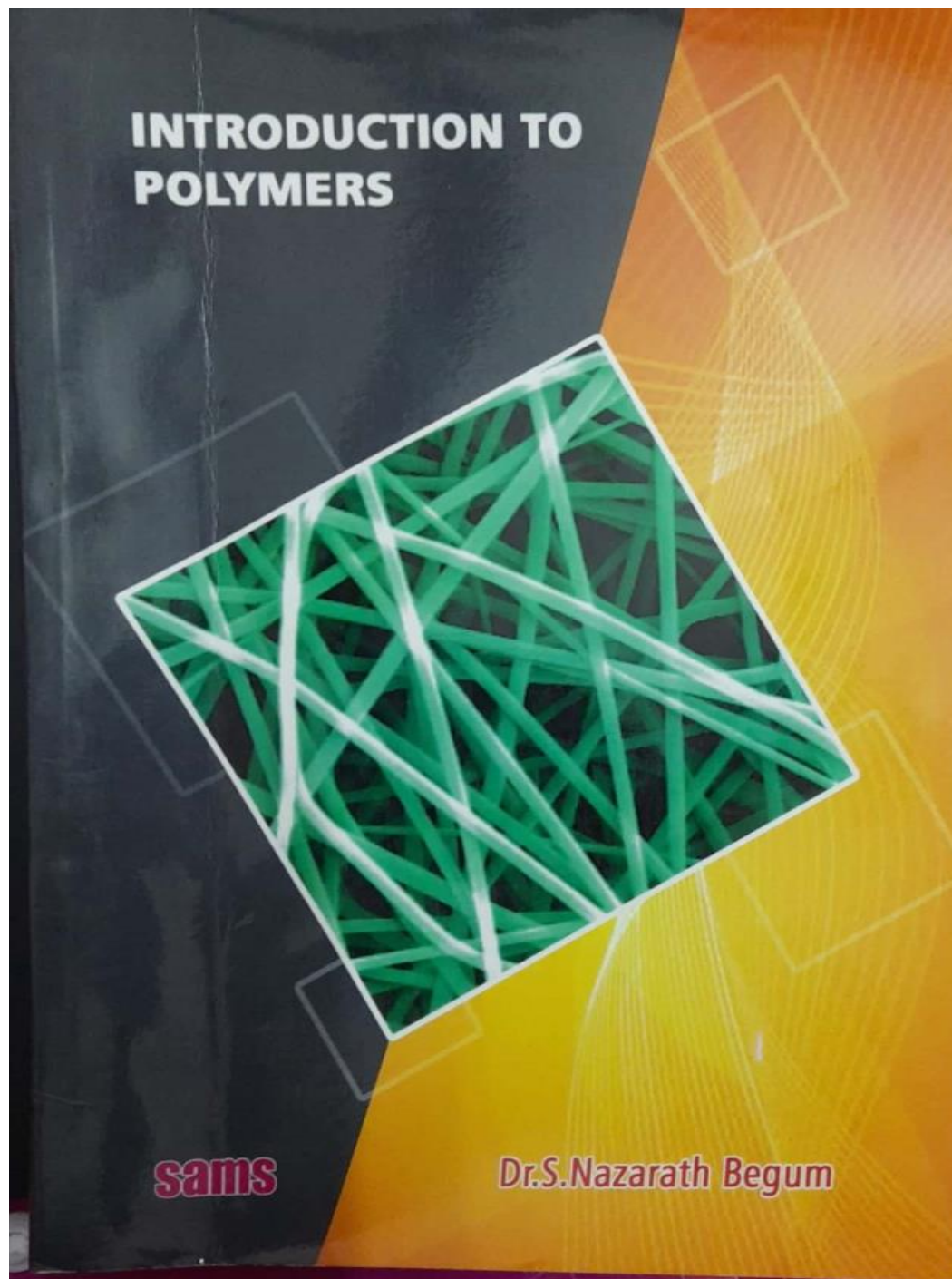
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She published many research papers in reputed national and international journals and attended many national and international conferences.

She guided Ph.D. scholars in current research area. Her area of research includes Nano materials, Polymer nano composite, Crystal growth and characterizations.

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25th and 26th July 2019



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National Conference On Integration of Social Media into Education

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A STUDY ON CHALLENGES OF SOCIAL MEDIA IN HIGHER EDUCATION

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Abstract

Apart from the help of social media for learning and teaching, it is also being used for creating awareness and advertising. Social media creates educational institutions to provide stakeholders with information of new research programs, changes to policies, events, job vacancies, alumni engagement and institutional news. Some colleges and universities also avail social media as a tool for recruiting students. Social media gives a perfect platform to highlight new courses, research and teaching staff and campus facilities in an attempt to attract more students. However, the help of social media in higher education is not without some inherent limitations. Its limitations consist technological and privacy concerns, dominance of academics, passive behavior of students and absence of academic language usage. And to add to this list is the lack of awareness of the functionality offered by the social media platform

Key words: Social Networking Sites, Social Media, Pedagogy.

Introduction

Social media has got credibility over the years as a trusted source of information and platform where organizations can interact with audiences. Social media tools make the students and institutions with multiple opportunities to enhance learning methods. Through these networks, people can incorporate with social media plug-in that enable sharing and interaction. Students can be benefitted from online tutorials and e-resources that are shared through social networks and LMS's. There is valuable knowledge to be gained through social media such as analytics and insights on various topics or issues for study purposes. Social media is also a medium where students can establish beneficial connections for their placements. As an educational institution, it is crucial to be active in many social platforms possible; this create better student training strategies and shapes student culture.

Recruit High-Potential Students

With the number of students enrolled in higher education expected to reach 26, 20,000 lakh by 2025, higher education facilities are starting to realize that the need to stand out amongst the crowd, both online and offline. Recruiting the students requires creative social media strategies implemented all year long to keep prospects engaged with the school. Whether it's providing each department with leverage over their own social media channels or highlighting interesting courses on a regular basis online, universities and colleges can create meaningful connections with prospects with a well-curated social media presence.

Stay Connected with Alumni

For the most important part, post-secondary facilities require an amount of donated or fund raised money to continue offering best-in-class education. Traditionally, marketing efforts have been directed towards alumni from the school who are now successful members of society. Social media platform allows alumni to be reminded to donate to specific funding areas when it's needed most. From sharing a fund raising event on Facebook or celebrating successes on Instagram, post-secondary facilities are able to connect with alumni in a more meaningful and personal way on social media.

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A STUDY ON GST IMPACT ON AUTOMOBILE INDUSTRY



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Dr. M. Mohamed Siddik

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Abstract

In India, automobile industry has a large share of business by producing a large number of cars and bikes annually. It is powered mostly by the vast population of the country. In previous tax system, there are several taxes applicable on this sector like excise, VAT, sales tax, road tax, and motor vehicle tax, registration duty on bikes and cars which will be subsumed by GST. Under GST tax rate system, the free services/warranties would also be eligible for taxation. Goods and Service Tax on automobiles has importantly minimized the cost of transporting goods, as transportation anywhere in India doesn't pass through check posts or various taxes. It has, reduced the price of automobiles across the country when compared to the prices before GST.

Keywords: Automobile, VAT, GST.

Introduction to GST

India's biggest indirect tax reform in the form of Goods and Services Tax (GST) has completed 2 year. A comprehensive dual GST was introduced in India from 1st July 2017.

The proposal of moving towards the GST was first mooted by the then Union Finance Minister in his Budget for 2006-07. The speeches of ushering in GST took structured shape with the introduction of Constitution (122nd Amendment) Bill, 2014. The Bill was passed by the Parliament on 8 August 2016. This was followed by the ratification of the Bill by more than 15 states. On 12 April 2017, the Central Government enacted four GST bills:

- ❖ Central GST (CGST) Bill
- ❖ Integrated GST (IGST) Bill
- ❖ Union Territory GST (UTGST) Bill
- ❖ The GST (Compensation to States) Bill

In a short span of time, all the states approved their State GST (SGST) laws. Union territories with legislatures, i.e., Delhi and Pondicherry, have adopted the SGST Act and the other 5 union territories without legislatures have adopted the Union Territory GST Act.

The GST Council, a recommendatory body consisting of representatives of Central and state governments, has met on several occasions and taken principal decisions relating to tax rate structure, exemptions, rules, composition scheme etc. Over the period, the GST Council has recommended a reduction in the tax rates of various goods and services. It is

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A STUDY ON GROWTH RATE OF MULTI LEVEL MARKETING IN INDIA

***P.MOHAMMED BUHARI SALEEM**

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ABSTRACT

MLM indicates to multi-level marketing, it is also known as pyramid selling scheme, network marketing, and referral marketing. It is a marketing strategy used commonly by pyramid-structured companies for selling products and services, where workers act as both salespeople and buyers and the revenue of an MLM company in India or any other place is then derived from this non-salaried workforce. This is done by **MLM companies in India** or in the world maintains a steady number of sales, while the burden of having to sell & distribute the product/services is not put on the workforce alone. Some of the splendid MLM company in India include Amway, Avon, MaryKay, Forever Living, and the likes, which floated the Indian market with a bid to increase direct sales and provided employment opportunities that aimed at housewives, retired persons, and unemployed people.

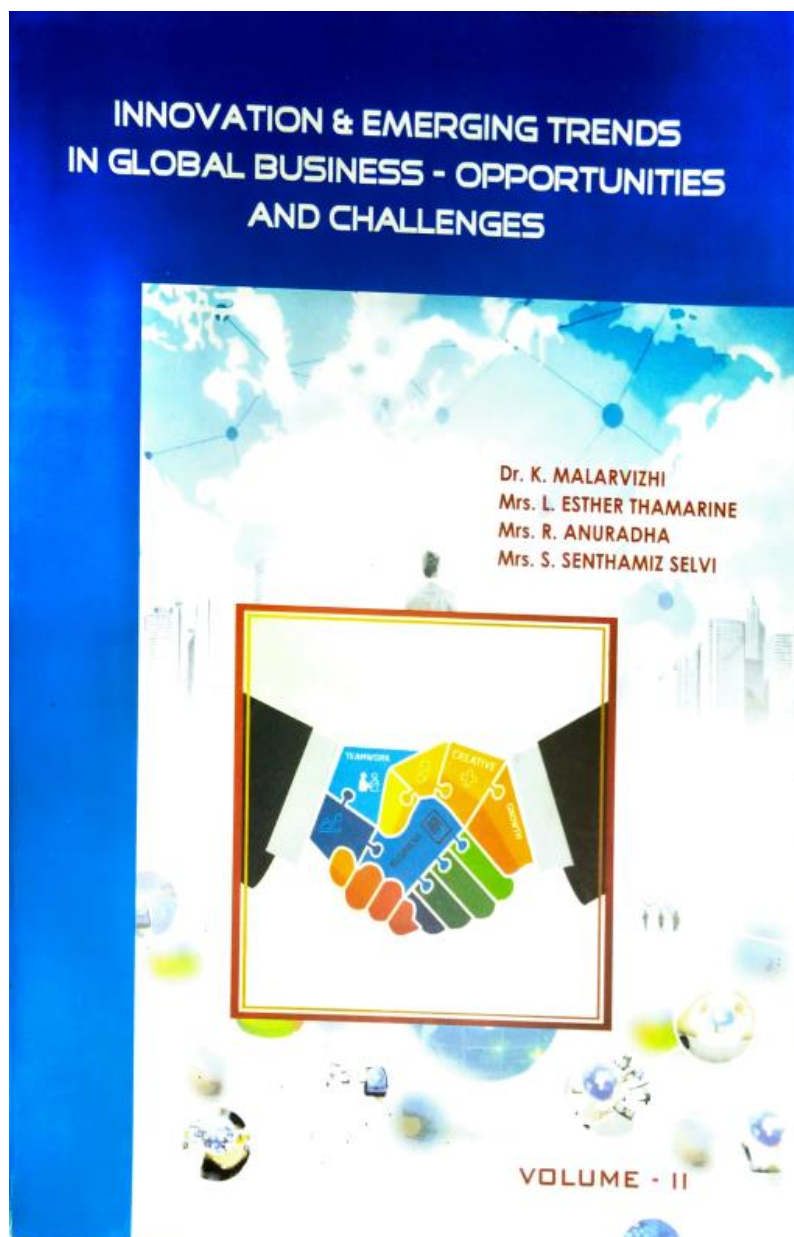
Keywords: Pyramid Scheme, Products And Services, Employment Opportunities.

INTRODUCTION

Multi Level Marketing also referred as Network marketing, Pyramid selling and Referral marketing strategy for the sale of products or services where the revenue of the MLM Company is come from non salaried workforce selling the company's products/services, while the earnings of the workforce are derived from a pyramid-shaped or binary compensation commission system. Despite each MLM company dictates its own definite financial compensation plan for the payout of any earnings to their respective participants, the ordinary feature which is found across all MLMs is that the compensation schemes theoretically pay out to participants only from the two potential revenue streams. The first and foremost stream of compensation can be paid out from commissions of sales made by the workers directly to their own retail customers. The second stream of compensation scheme can be paid out from commissions based on the sales made by other distributors below the participant who had recruited those other participants into the MLM; in the organizational hierarchy of MLMs, these participants are referred to as one's down line distributors.

Multi Level Marketing salespeople are, therefore, anticipated to sell products directly to end-user retail consumers by means of relationship referrals and word of mouth marketing. But most importantly they are incentivized to recruit others to join the company as fellow salespeople so that these can become their down line distributors.

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A STUDY ON ROLE OF NBFC'S IN ECONOMIC GROWTH

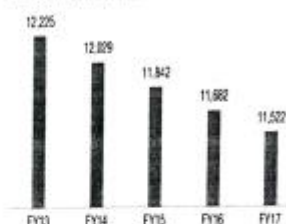
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THE ROLE OF NBFC'S IN THE INDIAN ECONOMY

NBFC's (Non Banking Financial Companies) promoting inclusive growth in the country, by catering to the various financial needs of bank excluded customers. In addition, NBFC's often take lead role in offering innovative financial services to Micro, Small, and Medium Enterprises (MSMEs) most suitable to their business needs. NBFC's do play a critical role in participating in the development of an economy by offering a fillip to employment generation, transportation, and wealth creation, bank credit in rural segments and to uphold financially weaker sections of the society. Emergency services like guidance and financial assistance is also provided to the customers in the matters pertaining to insurance.

Number of NBFCs in India



NBFC's are financial intermediaries that engaged in the activities of accepting deposits delivering credit and play an important role in channelizing the exceptional financial resources to capital formation. It supplement the role of the banking sector in meeting the growing financial needs of the corporate sector, delivering credit to the unorganized sector and to small local borrowers. However, they do not contain services related to agriculture activity, industrial activity, sale, purchase or

construction of immovable property. In India, despite being differ from banks, NBFC are bound by the Indian banking industry rules and regulations.

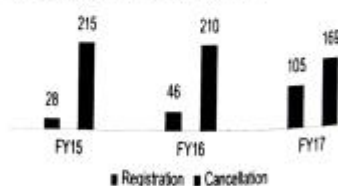
NBFC mainly focuses on business related to loans and advances, acquisition of shares, stock, bonds, debentures, securities issued by government or local authority or other securities like marketable nature, leasing, insurance business, chit business, hire-purchase.

The banking sector would always be the most important sector in the branch of business. Because of its credibility in supporting infrastructural development, manufacturing and even being the backbone for the common man's money. But despite this, the role of NBFCs is critical and their presence in a country would only boost the economy in the right direction.

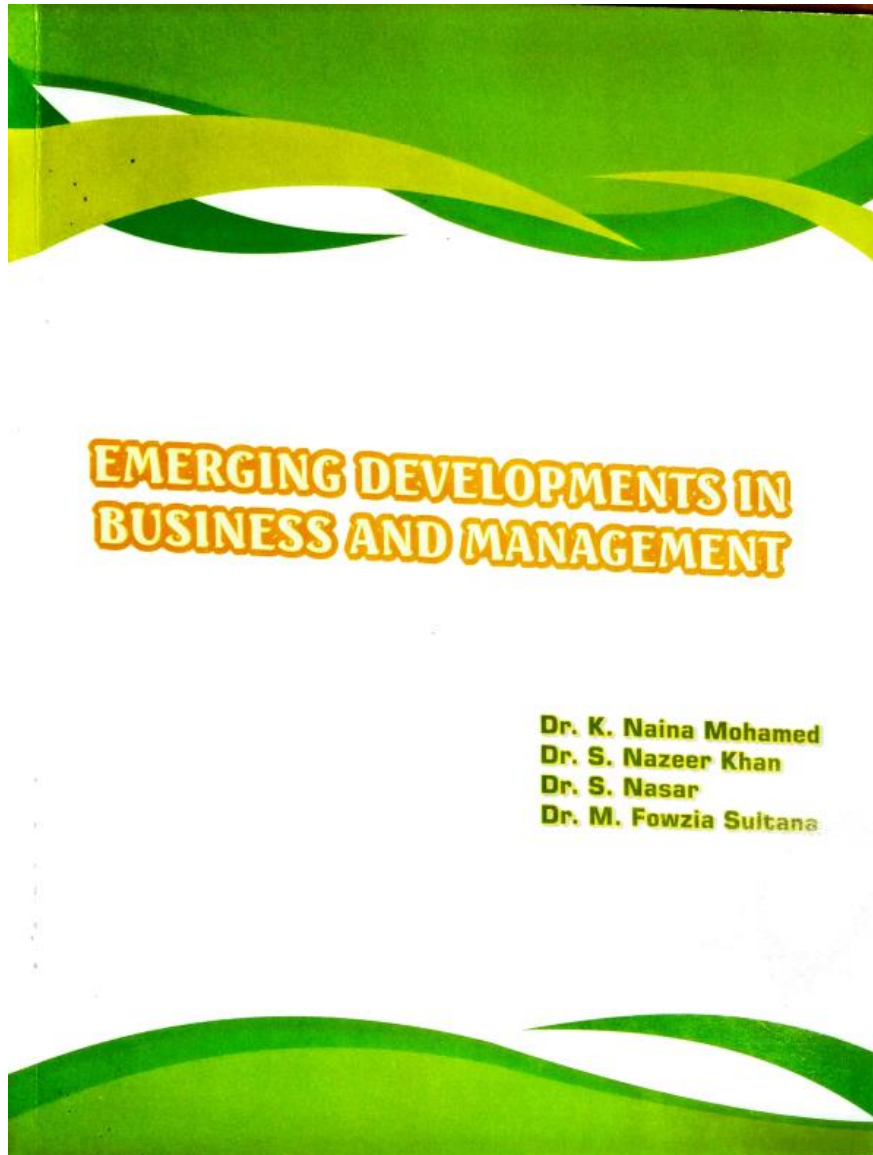
NBFCs aid economic development in the following ways

- Mobilization of Resources - It transforms savings into investments
- Capital Formation - Assist to increase capital stock of a company
- Provision of Long-term Credit and specialized Credit
- Assist in Employment Generation
- Help in development of Financial Markets
- Helps in Attracting Foreign Grants
- Helps in Breaking Vicious Circle of Poverty by serving as government's instrument

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A STUDY ON E-TAILING MARKET GROWTH RATE IN INDIA

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Abstract

The evolution of E-tailing in India can be categorized into two phases based on the emergence of various sub-segments. The distinct developments define each of these phases. Year-wise evolution of the introduction of internet in India in 1995 marked the beginning of the first wave e-commerce in the country. Economic LPG after the launch of reforms in 1991 attracted Multi National Companies and brought about the growth of the Information Technology industry. The implementation of liberalization policies led to the demise of the license regime, and multiple taxes and import restrictions as well as facilitated growth of Small and Medium Enterprises. The IT industry and SMEs were the pioneer adopters of the internet. This led to the emergence of B2B, job searches and matrimonial portals.

Definition of E-Tailing

The famous definition of E-tailing: Electronic Retailing - E-tailing includes the sale of goods and services through the Internet. Electronic retailing, or e-tailing, can include business-to-business and business-to-consumer sales and Online shopping web sites for retail sales direct to consumers.

Online shopping (normally known as **e-tail** from "electronic retail" or **e-shopping**) is a form of electronic commerce which allows consumers to directly buy goods or services from a seller through the Internet using a web browser at home.

Alternative names are:

web-store, e-shop, e-store, Internet shop, web-shop, web-store, online store, online storefront and virtual store.

E-Commerce Evolution in India

First Wave Evolution (1995-2000)

1. 1996- Launch of online B2B portals and Launch of online matrimonial portals
2. 1997- Launch of online job portals
3. 2000 to 2005- Muted activity in the industry due to the dotcom bubble in 2000

Second Wave Evolution (2006-Present)

1. 2006- Launch of online travel agents
 2. 2007- Entry of immense number of players in e-tailing segment
 3. 2010-Launch of first group buying website in India
- New trend of use of SNS as a marketing tool
The advent of social commerce

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Editor

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ISOLATION AND IDENTIFICATION OF HEAVY METAL (COPPER, MERCURIC) RESISTANT BACTERIA (*BACILLUS* SP) FROM SOIL

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ABSTRACT:

Soil is contaminated by the accumulation of heavy metals and metalloids through emissions from the rapidly expanding industrial areas. The accumulation of heavy metal even in traces is serious threat to the environment. The heavy metal cannot degraded into harmless compounds easily, thus there is need of microorganism to remove heavy metal from the environment. It provides alternative and or addition to conventional method of metal removal or metal recovery. The heavy metal is removed by microorganisms which are resistant to the heavy metal. In this present study, the heavy metal (copper and mercury) resistant bacteria isolated from soil. The isolated bacteria were identified as *Bacillus* sp using staining and biochemical examinations. The different concentration of Copper and Mercury (0.1 M, 0.5 M, 1.0 M) were prepared in distilled water. The resistant ability of identified *Bacillus* sp was examined using well diffusion technique.

The observation stated that the *Bacillus* sp have resistant to 0.1 M, 0.5 M concentration of copper and it didn't show resistant to different concentration of Mercury. The isolate further can be used for the bioremediation of copper.

KEYWORDS: *Bacillus* sp, Copper, Mercury, Resistant, Bioremediation

INTRODUCTION:

Environmental pollution is a major global problem has serious risk to man and animals. The Primary factors for pollution are the development of modern technology and the rapid industrialization. The environmental pollutants are spread through different channels, many of which finally enter into food chain of livestock and man (Malik, 2004). The discharge of metals such as Ag, As, Au, Cd, Co, Cr, Hg, Ni, Pb, Pd, Pt, Rd, Sn, Th, U and Zn, responsible for the harmful effects on human health (Suranjana et al., 2009).

The removal of heavy metals from the soil and water around industry has been challenge. The heavy metal includes Zinc, Cadmium, copper, Lead, Nickel and Mercury have been reported as the most toxic pollutants (Cameron, 1992). The copper (Cu) is a major pollutant and hazardous heavy metal for the animals, plants, fishes and humans. The copper toxicity is also known as Copperiosis, which refers to the consequences of the copper in the body. The harmful effects of copper include a number of acute and chronic conditions such as Alzheimer's disease. It may damage the gills of the fish and liver, kidney, the nervous system of the animals. The mercury (Hg) is a major pollutant and hazardous heavy metal for the animals, plants and humans. The harmful effects of mercury are include muscle weakness, poor coordination, numbness in the hands and feet, skin rashes, anxiety, memory problems, trouble speaking, trouble hearing, or trouble seeing.

Physical and chemical methods have been proposed for the removal of the heavy metal from the environment, but these methods have some disadvantages such as cost-effectiveness, limitations, generation of hazardous by products (Gavrilescu, 2004; Wang and Cheng, 2010). Biological methods solve these drawbacks since they are easy to operate, do not produce secondary pollution and show higher efficiency (Chen et al., 2005; De et al., 2008). The microorganisms and plants are usually used for the removal of heavy metals in biological methods for the removal of heavy metal. The involvement of microorganisms to reduce pollutant concentration is known as bioremediation which is a natural process (Said et al., 1990).

The bioremediation of heavy metals using microorganisms has received a great deal of attention in recent years, not only as a scientific novelty but also for its potential application. Bioremediation is the cost effective and environment friendly method.

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IN VITRO ANTIMICROBIAL ACTIVITY OF SEAWEED EXTRACT AGAINST SOME FISH PATHOGENS

V.Asha, C.Sowmia Saraswathi, H.Sumiya Mufena, M.Bahima Afrin,
R.Janet Rani and K. Feroz khan

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Tirunelveli-11.

ABSTRACT:

The aqueous, methanol and diethyl ether extracts of three seaweeds viz., *Turbinaria conoides*, *Halimeda opuntia* and *Gracilaria verrucosa* were used for the investigation of *in vitro* antimicrobial activity and minimal inhibitory concentration (MIC) studies against 4 bacterial and 2 fungal pathogens of fishes. The antimicrobial screening of different seaweed extracts was performed by using disc diffusion method, among them methanol extracts showed maximum antibacterial and antifungal activity when compared to aqueous and diethyl ether extracts. Among the various microorganisms used, maximum antibacterial and antifungal activity was found against *Escherichia coli* and *Aspergillus flavus* and MIC studies showed that both of these organisms were found to be susceptible to the tested seaweed extracts and inhibited relatively lower concentration of about 12.5 mg/ml against *Turbinaria conoides*. When comparing among seaweeds, *Turbinaria conoides* showed maximum to other seaweed extracts. The results of the present study clearly envisaged that the antimicrobial activity of seaweed extracts may have acted alone or in combination were effective against tested fish pathogens.

KEY WORDS: Seaweeds, fish pathogens, antimicrobial activity, disc diffusion method, MIC.

INTRODUCTION

Aquarium keeping has been rated as the second most popular hobby (Olivier, 2001). According to the National Pet Owners Survey (NPOS) on 2007-2008 revealed that a total number of 142 million freshwater and 9.6 million salt water fishes were kept as pets in the US (APPMA, 2008). In India, a variety of marine and fresh water ornamental fishes are available. About 600 of species have been identified as potential fishes with ornamental value. The trade in India fetches about Rs. 50 crores /year.

Bacterial and fungal diseases are responsible for heavy mortality in wild and cultured fishes. The problems in the farms are usually tackled by preventing disease outbreaks or by treating the actual disease with drugs or chemicals. The use of antimicrobial agents has increased significantly in aquaculture practices (Alderman and Michel, 1992). Most entomopathogenic fungi have a wide range of temperature tolerances, but optimum temperature for infection, growth and sporulation are usually much more restricted (generally 20-30°C).

Marine halophytes are the specialized group of plants, which they adopted for high saline conditions which include seaweeds, mangroves, sea grass, salt marshes and blue green algae. They are also proven to have rich sources structurally diverse bioactive compounds with valuable pharmaceutical potential (Meyer and Hamann, 2002).

ELECTRIFYING THE WORLD WITH ELECTROGENIC BACTERIA

S. Abilash, R. Janet rani, M. Manohar,
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ABSTRACT

Microbial fuel cells (MFCs) have emerged in recent years as a promising yet challenging technology. They act as an alternative source of electricity which is conventional and the most substantial source. It has been reported that microbes can produce electricity by their metabolism. While utilising the substrate they produce electrons as by-product. We utilise these electrons to charge the batteries. Different substrates, different types of electrodes and different types of cells have been employed to increase the out flow of electrons. The microbes which produce electricity include *Sulfobacillus ferooxidans*, *Geobacterium* sp., etc... These species actually metabolise the substrates and liberate electricity. They may serve as the future power source. Their various applications include powering a whole city, pacemakers, and conventional source of clean green energy. These microbes can use waste water as substrates by which recycling waste water could be possible.

KEY WORDS: Microbial fuel cell, metabolism, *Sulfobacillus ferooxidans*, *Geobacterium* sp.,

INTRODUCTION

Microbial fuel cells (MFCs) have emerged in recent years as a promising yet challenging technology. In a MFC, microorganisms interact with electrodes using electrons, which are either removed or supplied through an electrical circuit (Rabaey et al., 2007). MFCs are the major type of bioelectrochemical systems (BESs) which convert biomass spontaneously into electricity through the metabolic activity of the microorganisms. MFC is considered to be a promising sustainable technology to meet increasing energy needs, especially using wastewaters as substrates, which can generate electricity and accomplish wastewater treatment simultaneously, thus may offset the operational costs of wastewater treatment plant (Lu et al., 2009). The knowledge that bacteria can generate electric current was first reported by Potter (1911). However, the real interest in MFCs has tremendously grown in recent years, both in terms of number of researchers as well as the applications for these systems. Moreover, the reported electric current output from the MFCs has also increased tremendously over the recent years. Over the past years, MFCs as a new source of bioenergy have been extensively reviewed. These include information on the various terminology and measurements used in these systems (Logan et al., 2006), state of the art information on MFCs and recent improvements in MFC technologies (Du et al., 2007), comparison of MFCs with conventional anaerobic digestion (Pham et al., 2006), practical implementation of BESs (Rozendal et al., 2008), bioanode performance in BES (Pham et al., 2009b), cathodic limitations in MFCs (Rismani-Yazdi et al., 2008). The mechanism of external electron transfer from two main bacteria in BES studies, *Geobacter sulfurreducens* and *Shewanella oneidensis* was described in great detail by Debabov (2008). 'Microbial fuel

**SCREENING OF ANTIBACTERIAL ACTIVITY OF MEDICINAL PLANT
EXTRACTS AGAINST THROAT INFECTION.**

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ABSTRACT

Bacterial or viral throat infection leads to an inflammation of tissue in throat that causes redness, pain and swelling of the walls of the throat. The most common bacteria cause throat infection is Group A *Streptococcus*. In this present study, the leaf extract of *Solanum virginianum* and *Solanum trilobatum* with solvents (benzene, glacial acetic acid, chloroform and amyl alcohol) were taken and used for the examination of the antimicrobial activity against *Staphylococcus aureus* and *Streptococcus pyogenes*. The oral samples were collected from patients using throat swab and pathogens were isolated and identified as *Staphylococcus aureus* and *Streptococcus pyogenes* by staining process and biochemical test. The well diffusion method was used to examine the antibacterial activity of leaf extract (*Solanum virginianum* and *Solanum trilobatum*) against identified pathogens. The maximum inhibitory activity was observed in *Solanum trilobatum* leaf extract taken with glacial acetic acid followed by *Solanum virginianum* leaf extract taken with benzene for both *Staphylococcus aureus* and *Streptococcus pyogenes*.

KEY WORDS: Throat infection, *Staphylococcus aureus*, *Streptococcus pyogenes*, *Solanum virginianum*, *Solanum trilobatum*.

INTRODUCTION

Throat infection is characterised by bacterial infection or a viral infection leading to an inflammation in the tissues of the throat that causes redness, pain and swelling in the walls of the throat. Throat infections are of two types, sore throat infection and red throat infection. A sore throat is a symptom of a wide variety of mild to serious diseases, disorders and conditions. A sore throat can result from infection, allergy, inflammation, trauma and other abnormal processes. A sore throat can occur in any age group or population. Sore throats are divided in three types, based on the part of the throat they affect (pharyngitis, tonsillitis, laryngitis). Sore throat symptoms include scratchy, burning, dry, tender and irritated. Causes of sore throat are cold, Chicken pox, Measles, Bacterial infection, Allergies, Dry air, Smoke, Chemicals and Injury. Sore throat are mostly caused by Group A *Streptococcus* bacteria. A red throat infection is caused by prolongation of sore throat, allergy and abscess. *Solanum virginianum*, and *Solanum trilobatum* are taken to observe the antibacterial activity. The solvent used here are benzene, glacial acetic acid, chloroform and amyl alcohol extracts.

Solanum virginianum

It belongs to the family *Solanaceae*. Phytochemicals are found in leaves, stem, roots, and fruit of *Solanum virginianum*. Phytochemicals such as alkaloids, terpenoids,

EVALUATION OF ANTIBACTERIAL ACTIVITY OF SELECTED MEDICINAL PLANT

Morinda citrifolia (L.) AGAINST SELECTIVE HUMAN PATHOGENS

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G. Subbu Lakshmi, M. Venkateshi Priya, A. Radha, S.K. Sundar* and B. Parthiban**

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ABSTRACT

Morinda citrifolia (L.), (Common name: Noni) is one of the traditional medicinal plant found to be effective for a wide range of ailments and metabolic disorders. The therapeutic property of the root, stem, bark, leaves, flowers and fruits of the same has already been reported. The current study focuses on the antibacterial activity of the Ethyl acetate, Petroleum ether, Chloroform and Methanol extract of leaf, seed and fruit of *Morinda citrifolia*. Five human pathogens viz., *Escherichia coli*, *Staphylococcus aureus*, *Pseudomonas* spp., *Klebsiella* spp., and *Salmonella* spp., were subjected to analysis. The data reveals that the seed extract showed best inhibitory activity against *Escherichia coli* and *Pseudomonas* species whereas *Salmonella* species, *Staphylococcus aureus* and *Klebsiella* species were not inhibited by any of the extract. In antibacterial activity assay of leaf and seed extract of *Morinda citrifolia*; *Staphylococcus aureus* and *Escherichia coli* had higher zone of inhibition (mm) in 90µl than 30µl and 60µl. Best activity produced by the seed extract is 12.52mm.

KEY WORDS :

Noni, *Morinda citrifolia*, Antibacterial activity, Therapeutic property.

INTRODUCTION:

Herbal and natural products of folk medicine have been used for centuries in every culture throughout the world. Scientists and medical professionals have shown increased interest in this field as they recognize the true health benefits of these remedies. "Let food be your medicine and let medicine be your food" was advised by the father of medicine, Hippocrates, over two millennia ago. *Morinda citrifolia* L. (Noni) is one of the traditional folk medicinal plants had been used for over 2000 years in Polynesia. It has been reported to have a broad range of therapeutic and nutritional value.

Of the 12 most common medicinal plants they brought, Noni was the second most popular plant used in herbal remedies to treat various common diseases and to maintain overall good health (Krauss, 1993). Noni is common name for *Morinda citrifolia* L. and is also

PRODUCTION OF CELLULASE BY *Pseudomonas fluorescens* FROM OIL CONTAMINATED SOIL

M. Parvathi, M. Jasima Beevi, S. Durga, M. Chithra, H. Rashidha,

T. Dhana Lakshmi and A. Radha

Department of Microbiology, Sadakathullah Appa College,
Rahmath Nagar, Tirunelveli- 11

Abstract

Microbial cellulases have wide spread applications in the field of industrial microbiology which includes pulp and paper industry, laundry and textile industry, food industry, brewing and agriculture. Cellulase refers to a group of enzymes which hydrolyzes cellulose, the most common organic compound and biopolymer present on earth. Successful utilization of cellulosic materials as renewable carbon sources is dependent on the development of economically feasible technologies for cellulase production and for the enzymatic hydrolysis of cellulosic materials to low molecular weight compounds. Thus, the present study aims at the isolation of cellulase producing bacteria from the oil contaminated soil from the petroleum reserve tanks, which can be considered for use in large scale bio-refining. Among the various species of bacteria screened for the cellulase activity, the presence of *Pseudomonas fluorescens* in the given oil contaminated soil was confirmed by culturing in CMC agar medium and characterized further by morphological, physiological and bio-chemical tests

Keywords

Cellulase, cellulose, CMC agar, *P. fluorescens*.

INTRODUCTION:

Cellulase is an enzyme produced by bacteria that catalyse cellulolysis. It is employed for organic waste bio-conversion for bio-fertilizer industry and production of chemical must be extremely withstand harsh industrial conditions. Cellulolytic micro organisms play a role in bio-sphere by reducing cell also convert into important product like sugar, single cell protein and antibiotics. Cellulase is an enzyme catalyzing the break down of cellulose. It is renewable carbon sources. Cellulolytic bacteria include aerobic species such as *Pseudomonas* & *Actinomyces*; facultative species such as *Bacillus* & *Cellulomonas*; strict anaerobes such as *Clostridium*. These are produced glucose, alcohol and protein.

MATERIALS & METHODS:

SAMPLE COLLECTION: The oil contaminated soil was collected from petrol bulk in Tirunelveli in a sterile container. Serially diluted upto 10^{-1} dilution. Prepare Nutrient Agar and Spread Plate method was done. Incubate the plate at 37°C for 24 hrs. The isolated pure culture inoculated in sterile nutrient agar slant.

SCREENING FOR THE ENZYME PRODUCTION:

The isolated pure strain were screened for production of extracellular cellulose using carboxymethyl cellulose agar medium contain carbon source. The pure culture streaked

POTENTIAL BIOPOLYMER PRODUCTION BY MICROORGANISMS FOR MITIGATING CLIMATIC CHANGE

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Abstract

The usage of synthetic polymer is increased worldwide which accounts approximately 270.0 million tons of synthetic polymers in 2007. Disposal of these petrochemical-derived plastics create a serious threat facing before the present community. The impact of polymer production during its industrial process and usage in the public creates disposal consequences and climatic change challenge. Increase of CO₂, CH₄, NO₂ and SO₂ in the atmosphere is posing alarming issues which are enormously emitted during the production and burning of plastic materials. To overcome this problem by the view of the environmental health, it is essential to provide much importance for the development of biopolymer production. There are many types of biopolymers such as starch derivatives, polylactic acid, cellulose polymers and polyhydroxyalkanoates can be produced by using microorganisms. Various types of Polyhydroxyalkanoates (PHAs) are fundamental building blocks for biodegradable plastics which are microbial polyesters produced by various microorganisms including *Pseudomonas putida*, *Pseudomonas aeruginosa*, *Bacillus megaterium*, *Thermus thermophilus* and *Synechocystis* sp... This attempt is to provide the important types of biopolymers produced by microorganisms and its relevance to climatic change mitigation strategies which leads to sustainable development.

Key words: biopolymer, microorganisms, climatic change, Polyhydroxyalkanoates, sustainable development

INTRODUCTION

The increasing demand of plastic in packaging, building materials, hygiene products and various other applications resulted the manufacturing of millions of tons of polymer materials. These are petroleum derived non renewable resource impacts more on environmental condition. Used and disposed plastic creates serious problem by the accumulation and resistance to degradation making hazards to the environment. Eco-friendly approach for nullifying the threats faced by the present scenario, it is essential to focus our attention on the large scale production of biodegradable polymers. Microorganisms mediated biopolymers can be degraded by soil microorganisms. Carbon and nitrogen present in the biopolymers is permitting microbial growth and enzymatic action and converting it to CO₂ and water vapour as byproducts. Bioplastics can reduce CO₂ emissions by 30-70% compared with conventional plastics

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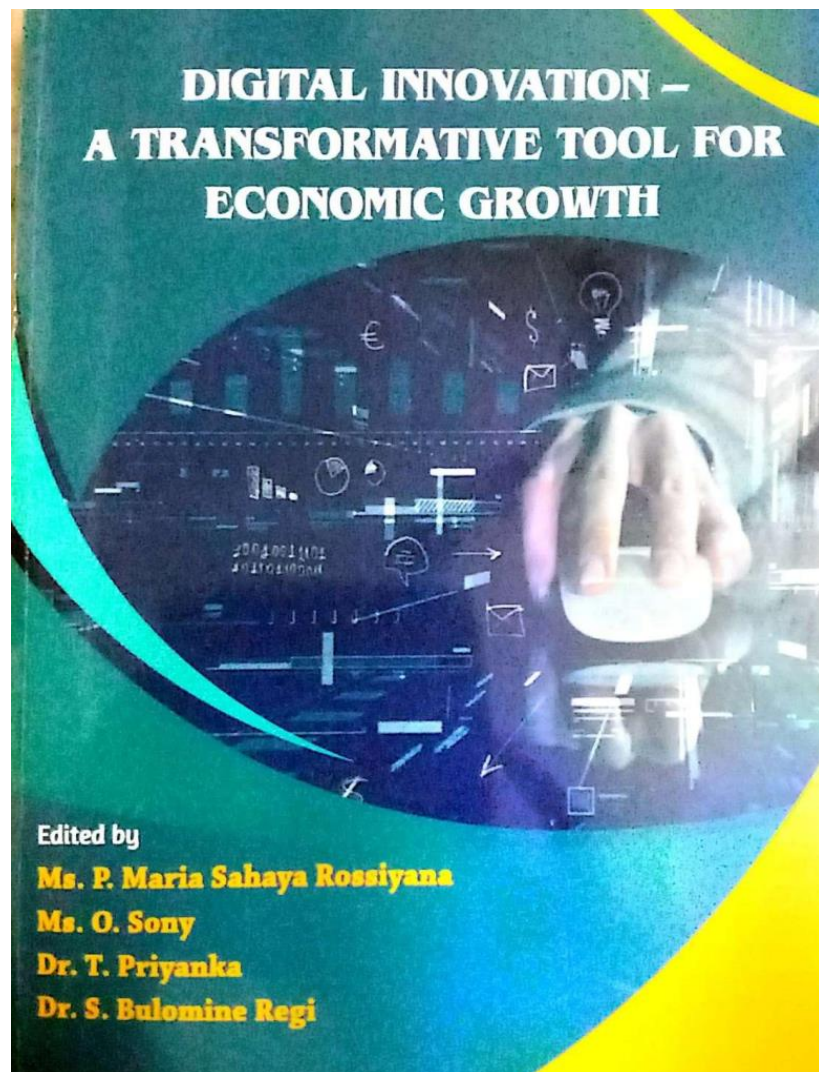
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A STUDY ON CONSUMER BEHAVIOUR WITH SPECIAL REFERENCE TO FOUR WHEELERS IN TIRUNELVELI



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Abstract

Transportation system is a milestone by mankind which satisfies one of the most basic needs of the human being precisely, the mobility. Automobile industry is a major constituent of surface transport and plays a vital role in the economic growth of a country. The human wants are unlimited and always expect more and more, and car models are no exception to this behavior which leads to constant modifications of car models and its features. Today, new models are coming into the market time and again it will go on.

Keywords: *Four wheeler, Consumer preference.*

Introduction

Transportation system is a milestone by mankind which satisfies one of the most basic needs of the human being precisely, the mobility. Automobile industry is a major constituent of surface transport and plays a vital role in the economic growth of a country. It is the industry which paves the way for reforms in foreign trade, invites foreign investment and facilitates the exposure of a country on a very broad international platform.

Review of Literature

Vijaya Kumar, S., has conducted a research study titled, "Consumer Behaviour relating to light vehicles in selected Urban centres in Tamilnadu". The objective was to analyse the relationship between Socio- Economic profiles of the buyers and the purchase pattern of light vehicles. He suggested that the manufactures of light vehicles at all times had increase the sales turnover.


Statement of the Problem

Human attitudes are complex in nature. In this complex world, consumer behaviour changes from one to another. Consumer decision making is a dynamic process. The preference of consumers differs from one to another. Majority of the consumers prefer style, high speed, light weight and smooth driving of four wheelers.

Scope of the study

The main scope of the study is to have a clear insight advertisements on consumer behaviour with special reference to four wheelers in Tirunelveli. An attempt has been made to find out the brand preferred by the customers and also identify the factors influencing the purchasing behaviour of customers.

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Introduction:

Mohandas Karamchand Gandhi (1869-30) was an Indian lawyer, anti-colonial nationalist, and political ethicist, who employed nonviolent resistance to lead the successful campaign for India's independence from British Rule, and in turn inspire movements for civil rights and freedom across the world. The honorific Mahatma, first applied to him 1914 in South Africa, is now used throughout the world.

Gandhiji was an anarchist. He was for such as stateless society in which like becomes perfect self-regulation, self-dependency and mutual cooperation and priority become essential in day-to-day human practices. According to Gandhiji an institution like a state or the system like democracy cannot be the final ideal. These are based on political power, therefore; they can only be the means of enabling people to better their condition and different level in different walks of life but cannot lead human beings to achieve the goal of life. In this regard he clearly wrote in young India on July 2, 1931, "To me political power is not an end but one of the means of enabling people to better their condition in every department of life.

Political power means capacity to regulate national life through national representatives. If national life becomes as perfect as to become self-regulated, no representation becomes necessary. There is then a state enlightened anarchy. In such a State everyone in his own master. He rules himself in such a manner that he is never a hindrance to his neighbour. In the ideal state, therefore, there is no political power because there is no State. But the ideal is never fully realized in life. Hence the classical statement of Thoreau that the government is best which governs the least- is worthy of consideration". It is clear that even being an astute anarchist and introduced and Ahimsa -based stateless society to the world, Mahatma Gandhi was himself not sure of transformation of his ideas into a reality.

Meaning of Democracy

Democracy is a form of Government which is very popular and also considered as one the most effective forms. In this form of Government, the majority of decisions are taken by the representatives that are chosen by the people. India follows the democratic type of Government. India is a big country and hence needs to be governed in a proper and an effective way. The representatives chosen by the people are the ones who take major

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Introduction

Mohandas Karamchand Gandhi was born on October 2, 1869 in Porbandar, a small seaside town on the shores of the Arabian Sea in India. His family, for many generations served in provincial governments as Prime or Home Ministers. Gandhi, the youngest of four children, was by his own confessions a painfully shy and fearful child. We pause and take a break from outlining the lessons from Gandhiji's life. Before proceeding any further, it would be appropriate to study in greater detail, two seminal events in the life of Gandhi. The two events like, the Salt March of 1930 and The Calcutta Miracle of 1947 go down in history as two of Gandhiji's finest moments and they will give us a deeper understanding of what Gandhi stood for and the power of the Satyagraha movement pioneered by him.

The Dandi March

In 1915, when Gandhi returned from south Africa and started to lead the Indian independence movement, he was open to the idea of dominion status for India, similar to what Australia and Canada had earlier gained. Britain, however, would have none of it; it refused to relax her stranglehold on the Indian colony. In the 15 years that Gandhi had been in India, Britain's repression and subjugation was only worsening. Gandhi now knew that dominion status would not do; India would need complete independence from an empire that was becoming increasingly evil.

On January 1, 1930, the Indian national congress defiantly unfurled a flag of "**Free India**". It was done to serve as a powerful symbol that India wanted complete independence, and that now she would struggle and strain with all her might to achieve it. The nation was restless, with everybody waiting and watching with bread breath. The youth around the country were beginning to get impatient and edgy. They hitherto had not believed in the efficacy of Gandhi's methods, dismissing him as a "**silly old fool**" and a "**Saint who cannot lead us**".

By end of February 1930, he had the answer. The British had imposed a steep tax on salt and Gandhi drawing on all his past experiences and experiments, developed a plan and strategy. The plan was that he and 78 of his fellow ashram members would march to the coastal town of Dandi, 240 Kilometers away, and pick up salt from the shoreline, thus technically breaking the law. This would then serve as a signal for the entire nation to

Dr. A. Abdul Azeez and M. Sahul Hameed,
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Introduction:

Mohandas Karamchand Gandhi is the most influential personality in modern Indian history. Even in the period when Gandhi was alive and even today, he has been actively involved in all the socio-political and economic problems of India. Gandhi played a major role in the eradication of untouchability and also for the Hindu-Muslim unity. If we try to understand Gandhi's personality without a deep understanding, we might consider him as a believer of caste. But as we delve deeper into his writings and actions, we become more aware of his actions against caste, especially against untouchability. That is why Gandhi says: "If untouchability lives Hinduism, must die" (Harijan, dated 28.09.1947). In this article we will examine Gandhi's legitimate vision for the future and his contribution to the betterment of untouchables.

Developing Opinion against Untouchability:

Gandhi grew up with the influence of his mother Puthlibhai in his youth. Puthlibhai was an ardent believer in Hindu rituals and used to fast regularly. Gandhi was very much influenced by her and thus he had a unique view of caste and untouchability. Gandhi recounts the conversation he and his mother had about the caste system: "Love of the people brought the problem of Untouchability early into my life. My mother Said. You must not touch back boy; he is an untouchable. Why not? I questioned back and from that day my revolt began." That is the reason why he wanted to be born as an untouchable in his next birth.

"I do not want to be reborn. But if I have to be reborn, I should be born an untouchable, so that I may share their sorrows, sufferings I therefore prayed that If I should be born again, I should not be born as a Brahmin Kshatriya Vaishya or Shudra but as an Atishudra. I have frequently said that I do not believe in caste in the modern sense. It is an excrescence and handicap on progress. Nor do I believe in inequalities between human beings. We are all absolutely equal. But equality is of souls and not bodies. Hence it is a mental state. We need to think of and to assert, equality because we see great inequalities in the physical world. We must realize equality in the midst of this apparent external equality. Assumption of superiority by any person over any other is a sin against god and man. Thus caste, in so far as it connotes, distinctions in status, is an evil."

Kasthuribhai and Gandhi:

Gandhi was managing two major ashrams in South Africa and he had decided to do the same in India. One of his friends temporarily rented a large bungalow in Kochrab and Gandhi started a new ashram named Satyagraha

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Introduction

Mahatma Gandhiji as the man led our struggle for freedom from British rule in India. He is also known as the "The Father of the Nation", in the nation of India. His name has been mentioned with respect and devotion in India and abroad, the intellectual class, as also the younger generation, have often asked whether Gandhiji's ideas were still relevant to our times. He emphasized the importance of his constructive program as nonviolent action. The constructive program established cultures and structures that support cycles of nonviolence in response to existing cycles of violence. Two forms of cultural nonviolence expressed were personal social responsibility, and unity of humanity. Two forms of structural nonviolence established were nonviolent self-sufficiency with dignity, and nonviolent education.

Constructive Program

The Kanpur Congress was held in the last week of December 1925. One of the resolutions the Congress laid great emphasis on constructive work. Hindustani was prescribed as the official language for the proceedings of the Congress and the A. I. C. C. Gandhiji did not take part in the debate on the political resolution. He declared that till the following December he would remain in his Ashram. Afterwards in an article in *Young India* he wrote that he was withdrawing from purely political work and would devote all his time to constructive work. During this period Khadi work received a great impetus. The constructive program evolved over time. Initially comprising four elements in 1919, it grew to eighteen elements by 1945. Even then, Gandhi did not consider it to be exhaustive. Gandhi's constructive program demonstrated eight qualities: intentionally nonviolent, voluntary, inclusive, autonomous, responsive to cultural and structural violence, self-reinforcing, context-specific, and comprehensive. The initial program consisted of Khadi, communal unity, prohibition of intoxicants, and removal by Hindus of untouchability. Gandhi promoted all four elements, with Khadi as the central piece. He urged Congress members to spin and wear Khadi to underscore the point that the constructive program required champions and involvement from the educated and wealthy citizens of India.¹

The eighteen elements listed in the version that Gandhi published in 1945 were as follows:²

- **Communal Unity:** Foster solidarity through friendships with followers of other religions.
- **Removal of Untouchability:** Eliminate idea and customs of untouchability from Hinduism.

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CONSERVATION OF SACRED GROVES AND SACRED TREES IN AND AROUND KARUNKULAM, TUTICORIN DISTRICT, TAMILNADU, INDIA.

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*Department of Botany, Sadakathullah Appa College (Autonomous), Tirunelveli – 627 011.

** Department of Pharmaceutics, S.A. Raja Pharmacy College, Vadakkangulam.

ABSTRACT

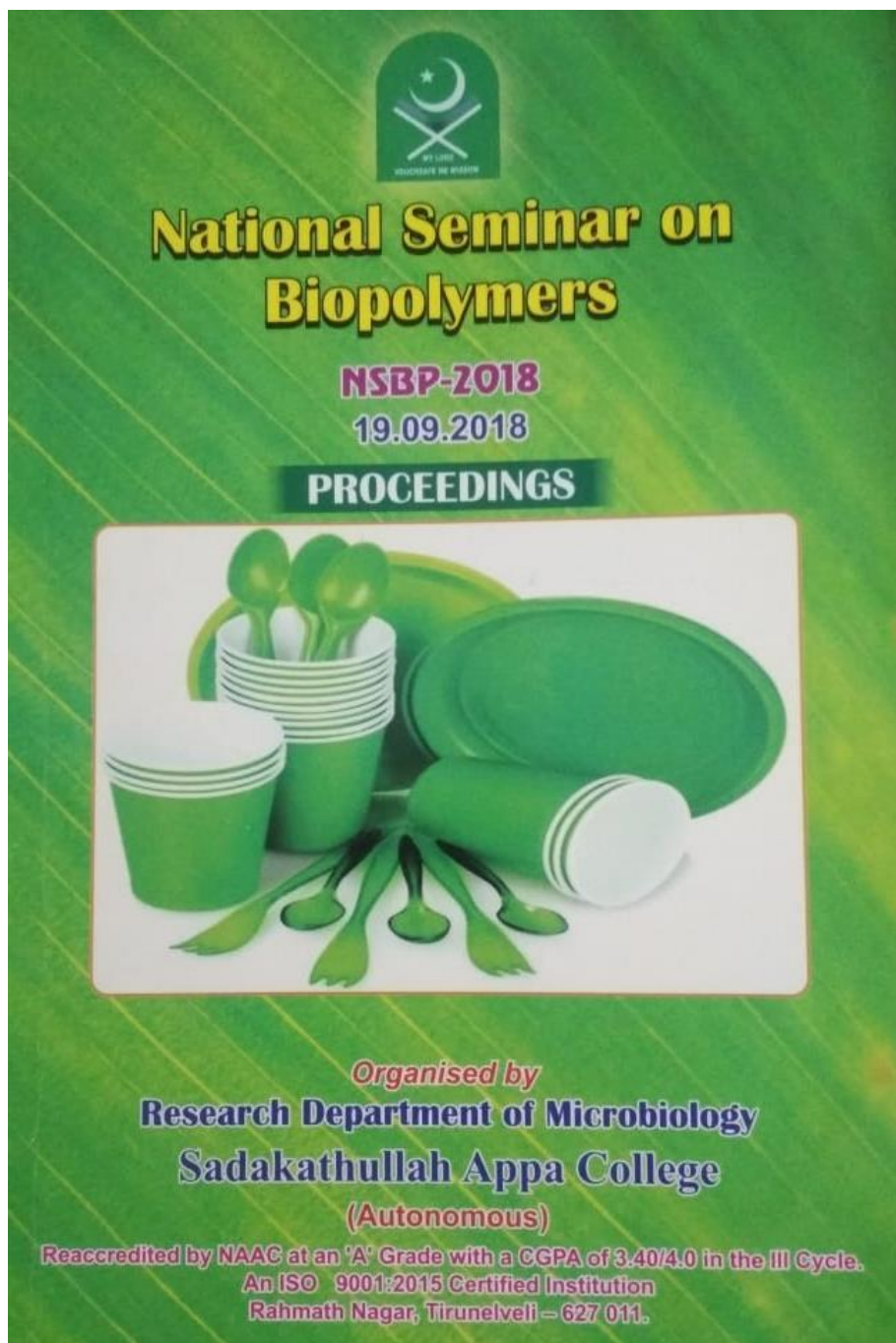
Trees and plants have long been held sacred to communities the world over. In India they feature in our myths, epics, rituals, worship, and daily life. Exploitation of Earth's natural resources is currently an essential condition of human existence. However, accelerated economic growth with high consumption level in developed countries and aspirations of developing countries to reach matching levels of growth are continuing to damage our Planet Earth's environment. Conservation of biodiversity has been possible in many ways. A survey on the sacred groves and sacred trees in and around Karunkulam area, Tuticorin district was made. Tree worship is a common practice of Hindu religion in India. Such trees are usually preserved by the people out of fear & religious sentiment. In the present survey, it was observed that 8 temple harbour sacred groves and 5 temple as a sacred trees. Since most of these preserved, the plant species with its medicinal value.

Keywords: Sacred groves, Biodiverstiy, Conservation, Exploitation.

Introduction

India is among the 12th mega biodiversity countries in the world having 25 hot spots of the richest and highly endangered eco-region of the world (Myers *et al.* 2000). Due to increasing pressure of population, degradation and depletion of forests, it remains a challenging task to manage forests in a sustainable manner. India is classified under one of the low forest cover countries and account for 23.8% of total geographical area of the country (FSI Forest Survey of India (2005)). The concept and beliefs of sacred trees and groves of forests are one of the best practices to conserve the natural resources. Sacred groves (SGs) are small forest areas that are left untouched by the local inhabitants to be conserved by the local village folk deities and are of special spiritual significance to them. Sacred groves, also known as church forests, fetish forests and sacred forests, are found all over the world including Ethiopia, Japan, Morocco, India, and Ghana (Cardelús *et al.* 2013). Around 1,00,000 to 1,50,000 sacred groves are reported in India (Malhotra *et al.* 2007). Different scientific

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EVALUATION OF ANTIBACTERIAL ACTIVITY OF MEDICINAL PLANT

Pouzolzia wightii Benn. LEAF EXTRACTS

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011.

ABSTRACT

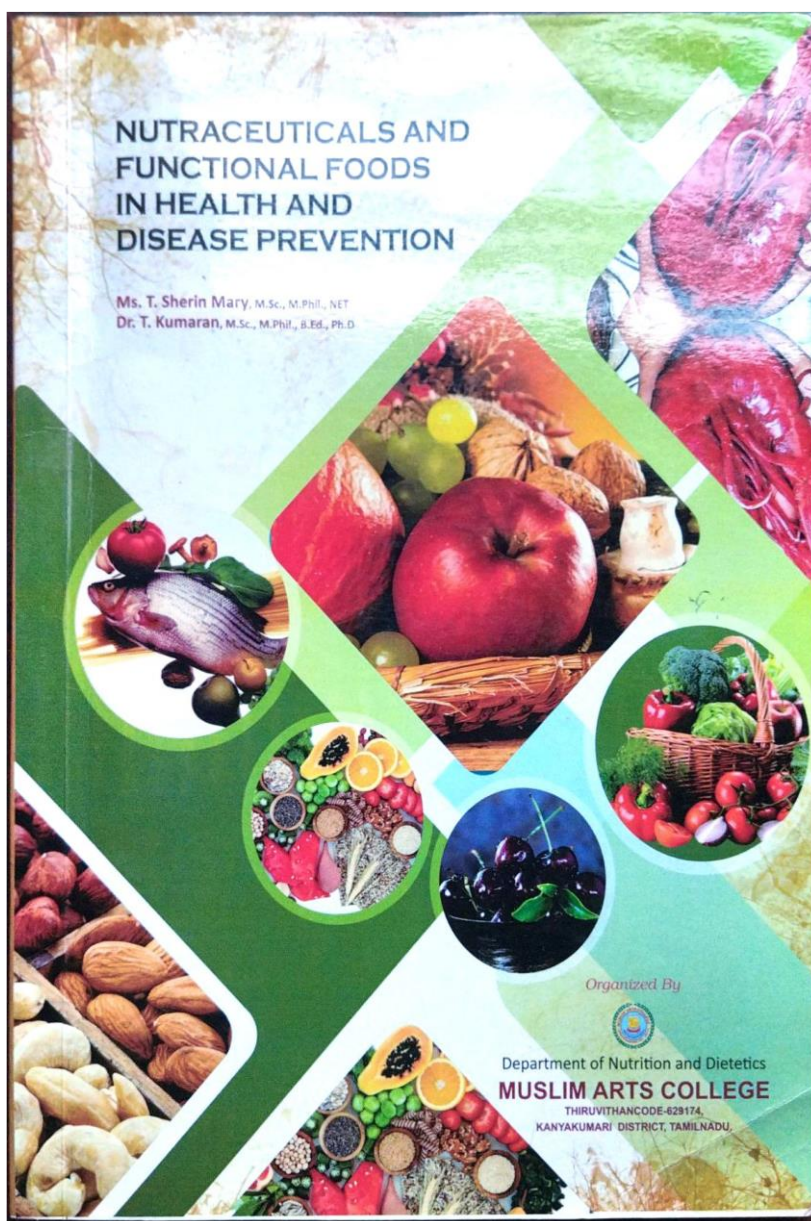
In many countries medicinal plants play a vital role in health care provision and they have been used for treatment of numerous diseases for thousands of years. Plants are used as a source of medicinal agents for antibacterial, antihelminthic, astringent, emetic, febrifuge, sedative and stimulant. Many higher plant species possess a novel source for new drugs and are still largely unexplored. *Pouzolzia wightii* is a shrub which belongs to the family of Utricaceae. *Pouzolzia wightii* is widely distributed in the Southern Western Ghats (Tamilnadu and Kerala). The different parts of *Pouzolzia wightii* are useful for anti-inflammatory, wound healing, ulcers and boils. Due to advancement in science and technology, remarkable progress has been made in the medicinal field, with the natural and synthetic drug discovery. With this background this present study was intended to screen the antibacterial potential of *Pouzolzia wightii* leaves with five different extracts. The result of the present study showed the presence of wide spectrum of antibacterial activities against *E. Coli* (16.10mm) followed by *K. pneumonia* (16.03) in *Pouzolzia wightii* leaves ethanolic extracts. Further research on the isolation of active principles from *Pouzolzia wightii* may leads to find an alternative medicine with antibacterial property.

KEYWORDS: Antibacterial activity, medicinal plants.

INTRODUCTION

In many countries medicinal plants have vital roles in the healthcare provision and they have been used for the treatment of numerous major human health diseases for thousands of years (Latheef *et al.*, 2008 and Munshi and Osman, 2014). Plants naturally produce a variety of chemical constituents to protect themselves against a variety of pathogens (Enne *et al.*, 2001; Westh *et al.*, 2004). Plants have the best source of drugs (Wolabi *et al.*, 2007). Different drugs are obtained from the different parts of the medicinal plants such as stem, root, flowers and fruits (Mahesh and Satish, 2008 & Abdel *et al.*, 2012). Leaves are also used for the therapeutic purpose. It is being used as resource of medicinal agents for antibacterial, anti helminthic, astringent, emetic, febrifuge, sedative and stimulant. Natural products moreover as pure compounds or as standardized plant extrats offer unlimited opportunities for new drug. Antibiotics supply the main basis for the therapy of bacterial infections (Tambekar and khante, 2010). Most of the biologically active metabolites are synthesized from secondary metabolic pathways by the medicinal plants during the vegetative phase. Compounds are dependable for the therapeutic properties of the medicinal plants (Silva *et al.*, 1996). Several medicinal plants include antimicrobial activities

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EFFECT OF NUTRITION EDUCATION ON TRIBES BELONGING TO KOTHAIYAR HILLS

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Abstract

Consumption of safe foods is one of the basic issues for societies. Foods produced respecting hygiene standards are of importance in improving and protecting human health; however, insufficient control is regarded as one of the major risk factors that cause foodborne diseases. In this study Sample of 40 subjects within the age 30 to 40 years were selected for the study, to assess their personal hygiene, sanitation, and food Hygiene. Out of these, 28 samples 14 (08 Males & 06 Females) were chosen as the experimental group and the rest were treated as control group. Evaluation was carried out by comparing the results before and after the intervention study through the administration of posttest questionnaire. After awareness with nutrition education for three weeks, the same questionnaire was distributed again and their levels of knowledge were tested and assessed.

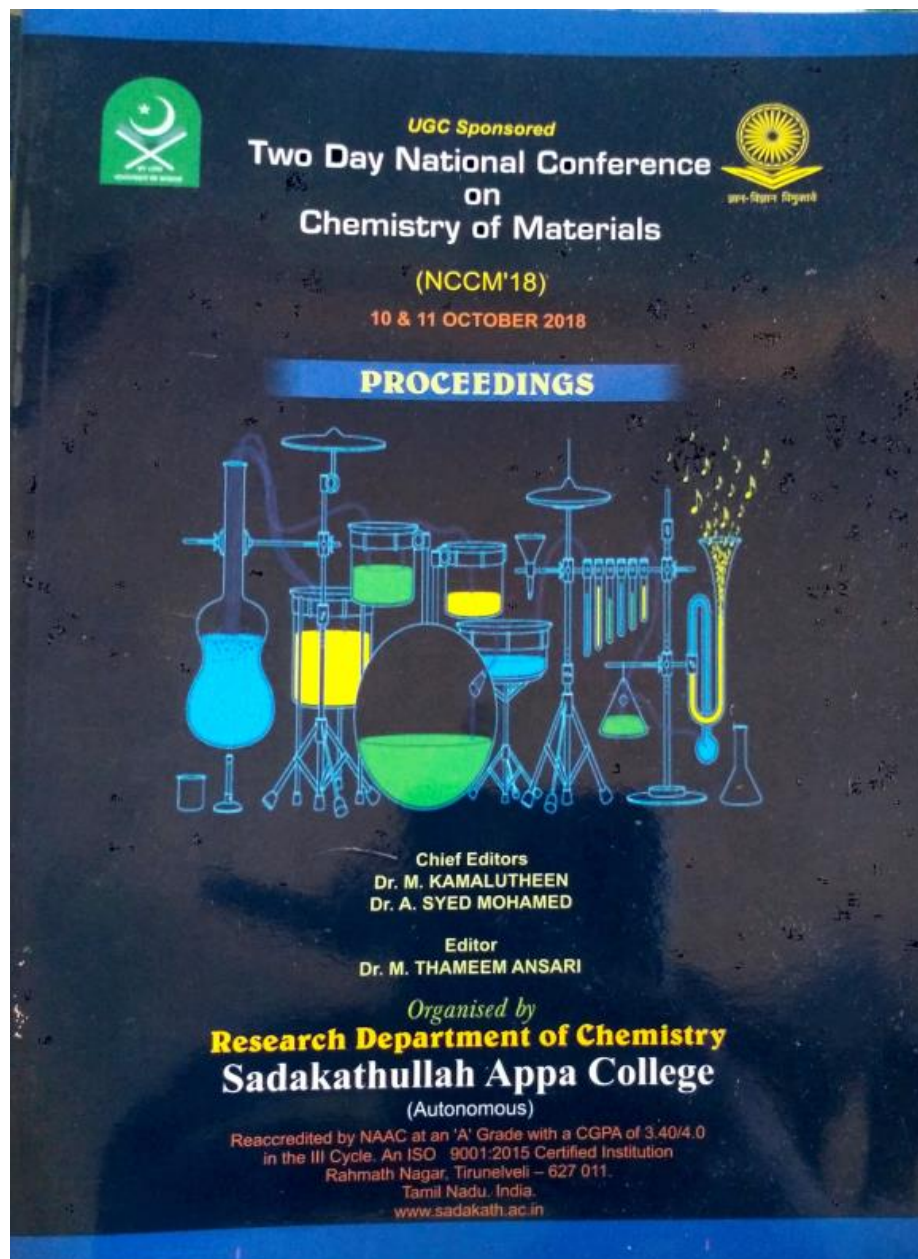
Key Words: Hygiene, control, experimental, sanitation, evaluation, awareness

Introduction

Foods and therapeutic product are both used for well-defined purpose. In simple terms food provides energy for sustenance, while therapeutic products are taken for managing ailments (Thompson, 2006). However, over the years roles of foods have changed considerably now food no longer is seen as simply the provider of energy, but it is expected to provide physiological benefits for good health and productive lifestyles (Faria, 2007). Well managed combination of foods and therapeutic products plays an important role in the prevention and treatment of many diseases, including a number of chronic diseases such as cancer, diabetes, hypertension, obesity (Guo, 2004).

Every year a great number of people are hospitalized or die throughout the world due to the consumption of contaminated food (Mead et al., 2006). Foods of animal's origin are perishable food stuffs which need special attention during processing, preparation, transportation and storage to avoid them becoming contaminated and causing ill health to the consumers (Rajeswari and Parmeswaran, 2013). Raw foods such as meat, fish milk and vegetables grown on sewage purchased from the market are likely to be contaminated with harmful, microorganisms (Swaminathan, 1985). At the same time hands are also responsible in transmitting diseases, through microorganisms, hence medical workers should keep their hands thoroughly clean before making contact with consumers. The hands are one of the most cause of cross infection and spread of flu. To avoid spread of infection, signs must be posted at each and every sink instructing when and how staff volunteers etc should wash hands (Satish Gupta, 2011). The commonest source of infection in humans are human themselves. The parasite may originate from a patient or a carrier. Many pathogens are able to infect both human beings and animals and may, therefore, act as source of human infection (Ananthanarayanan, And Paniker, 2009)

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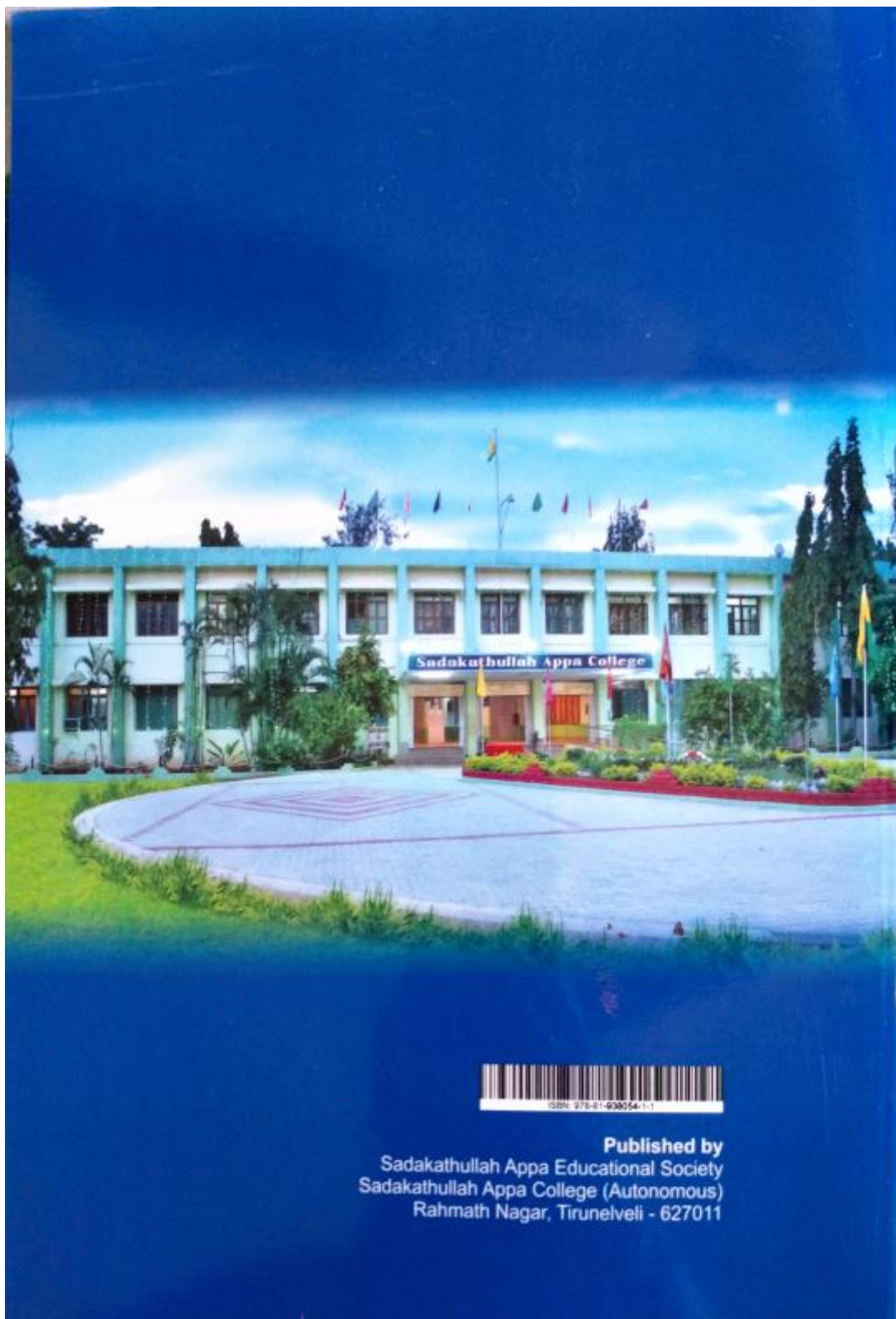


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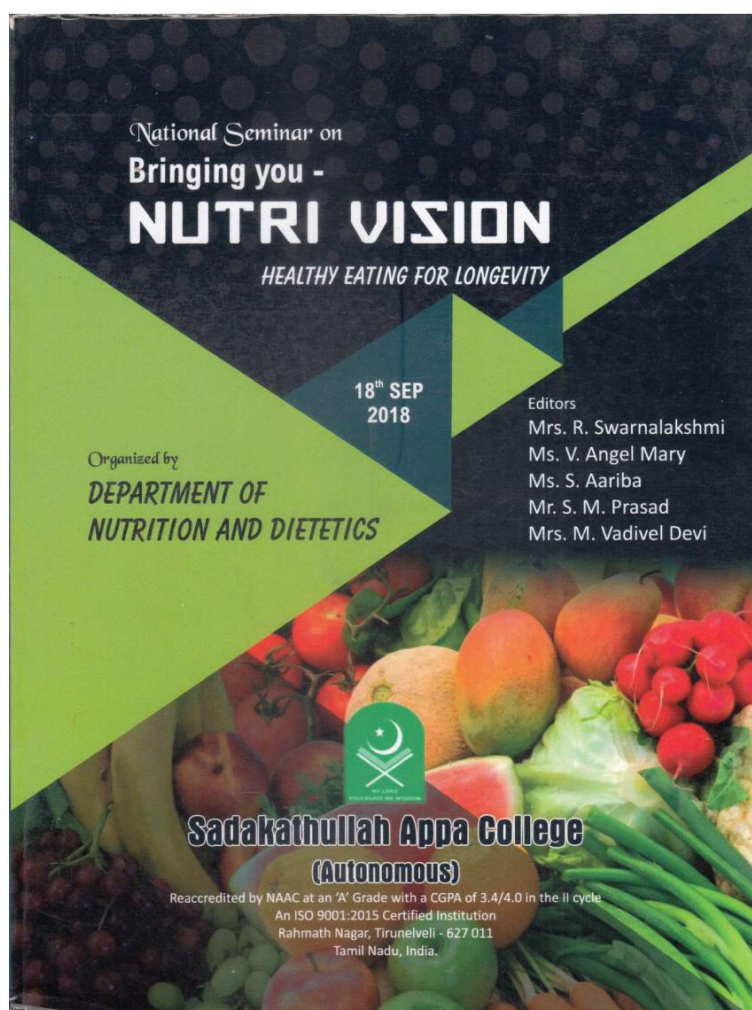
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INFLUENCE OF DIETARY CUSTOMS ON PREMENSTRUAL SYNDROME

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Abstract

The aim of the study was to assess the influence of food intake on premenstrual disorders in young college girls. This cross sectional study was conducted during January 2017 to March 2017, at Sadakathullah Appa College. 150 Under graduate final year students from selected departments having regular menstrual cycle were participated in this study. Pre Menstrual Syndrome (PMS) was diagnosed according to International statistical Classification of Disease and related health problems-10 revision (ICD-10) criteria. Among the 150 students, 96 % showed symptoms of PMS. Irritability (56%) and angered easily (53%) are the two major psychological symptoms. Major physiological symptoms such as backache in 88 (59%), fatigue in 72 (48%), depressed mood in 57 (38%), anxiety in 64 (42.6%), generalised headache in 61 (40.6%), insomnia in 46 (30.6%), irritability in 84 (56%), acne in 81 (54%) students respectively. Overall academic activities were affected in 84 (56%) students. Abstinence from work (45%) was the major behavioural symptom. Young girls who were currently on a diet, become unhealthy especially very lean and anaemic were suffered by multiple symptoms than the healthy ones. The findings of the study revealed the fact that PMS is a common disorder and it negatively affects the academic activities of the young college girls. So it is recommended that health education and counselling need to be provided to the girls to overcome these problems.

Keywords: Pre Menstrual Syndrome, ICD, multiple symptoms, counseling

Introduction

Dietary habits are fundamental factors that influence human life styles and individual quality of life. In addition, the adverse effects of environment, hormones or toxins on human health, which will be manifested in later life, have been pointed out (Fujiwara 2004, Smith 1989, Cerin 1993). Nowadays our Indian college going girls are attracted towards consumption of fast food and skipping their breakfast. The wrong selection of western food may lead to the consumption of unbalanced diet lacking essential nutrients, which is essential for their general and reproductive health.

Young adolescent girls are usually suffered by some physiological problems associated with their menstrual cycle. The common problem they are facing is Pre Menstrual Syndrome (PMS), a multifactorial syndrome that affects adolescent girls with a high frequency. It shows a list of symptoms which include mild psychological discomfort, feelings of bloating and weight gain, breast tenderness,

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DEVELOPMENT OF VALUE ADDED PRODUCT FROM TUNA (MASI)

***Mohamed Ramlath Sabura, S., *Delighta Mano Joyce, M.I., **Hasna Naziya, I.**

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ABSTRACT

Tuna is a type of saltwater fish that belongs to the same family as mackerel fish and bonito fish. They are members of the Thunnini tribe, which includes 15 different tuna species. This fish is a powerhouse of essential nutrients such as omega-3 fatty acids, potassium, magnesium, iron, vitamin A, B6 and B12, and as such is beneficial for health. The meat of the tuna fish is often sold frozen, fresh or canned and is widely consumed around the world as a popular ingredient for sandwiches, salads, casseroles and sushi rolls. The fish is boiled with water, a handful of salt, two teaspoons of turmeric powder for 20-30 minutes. After half an hour the cooked fish was taken out and sundried for about a week. This is the main product called "Masi". To make value added products, the dried masi is ground with dried red chilli and salt which is called as Masi podi. Masi sambal, Tuna Salad, Cheeni sambal, are some of the well known dishes made from masi powder.

KEY WORDS: Tuna, nutrients, mackerel fish, masi, casseroles

INTRODUCTION

A tuna is a type of saltwater fish that belongs to the same family as mackerel fish and bonito fish. They are members of the Thunnini tribe, which includes 15 different tuna species. Tuna fish are of varying species and are found all over the world oceans such as blue fin, yellow fin, bullet tuna and to name a few. Life of tuna fish varies from three to five years though some are known to have lived for more than two decades. They are comparatively easy to catch and go in the making of delicious dishes like steaks, salads, burgers and the like. They are nomadic, which means that they keep migrating.

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ANTICANCER ACTIVITY OF *POUZOLZIA WIGHTII* BENN. STEM ETHANOLIC EXTRACTS AGAINST HELA CELL LINE

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ABSTRACT

Medicinal plants are component and bundle of human society to struggle diseases, from dawn of civilization. Plants are the largest source of herbal medicines in the world. About 60-80 % of human beings still depend on plant based medicines as traditional human health care system. *Pouzolzia wightii* belongs to family: Utricaceae, a native of Southern Western Ghats. In India it is distributed in Tamilnadu and Kerala. Different parts of this plant have the various uses like anti inflammatory, wound healing, ulcers, boils. The present study reports that ethanolic extracts of *Pouzolzia wightii* stem have been tested for anticancer activity. *In-vitro* anticancer studies were performed against human cancer cell line (HeLa) and MTT assay was used to analyze the cell growth inhibition. The results showed that the ethanolic extracts of stem of *Pouzolzia wightii* possessed a moderate amount of anticancer activity with an IC_{50} value 187.1 μ g/ml.

Keywords: HeLa, MTT assay, IC_{50}

INTRODUCTION

Now a day's utility of medicinal plants has been increasing day by day in the present world. Compounds which are naturally derived from the herbs are safer and easily biodegradable than the synthetic compounds. So that the problem of resistance observed in synthetic drugs is also reduced (Chandrasekhar, Balasubramaniam, 2011). Higher plants, a source of many plant derived compounds, have an important role in health care of human beings. Therefore medicinal plants have received a significant interest in anti-cancer therapy. Medicinal herbs do not have any

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CONSERVATION OF SACRED GROVES AND SACRED TREES IN AND AROUND KARUNKULAM, TUTICORIN DISTRICT, TAMILNADU, INDIA.

S. Muthugayathri, M. Syed Ali Fathima* and A. Mohamed Ansar**

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ABSTRACT

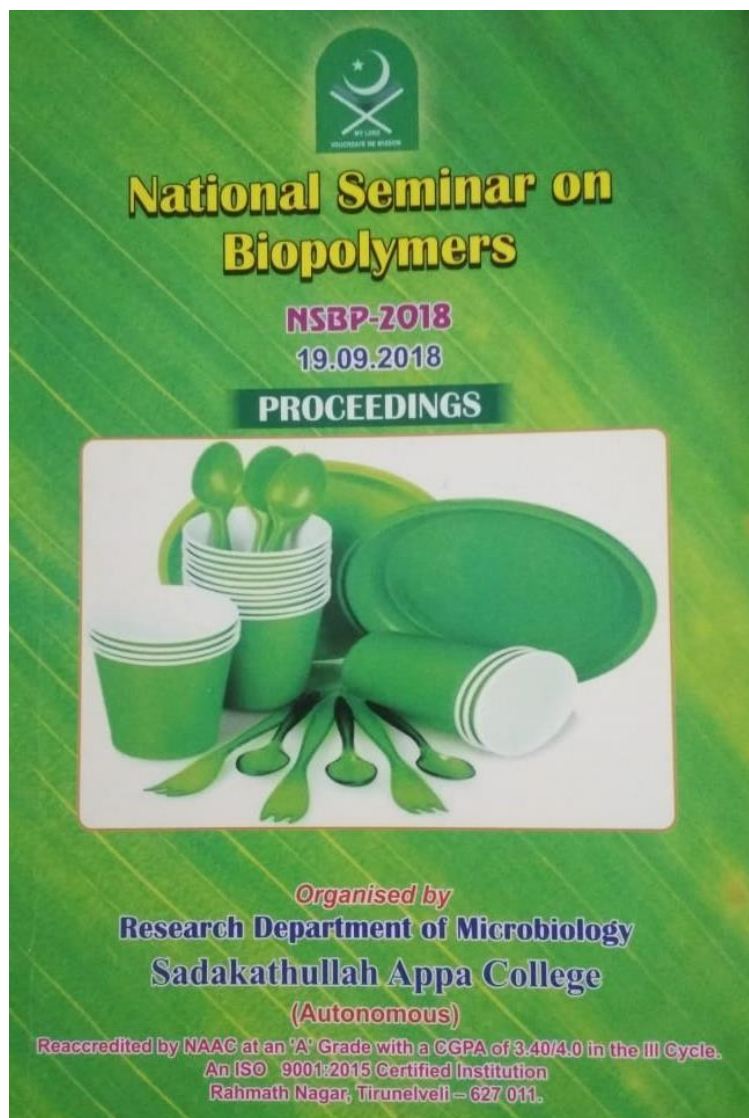
Trees and plants have long been held sacred to communities the world over. In India they feature in our myths, epics, rituals, worship, and daily life. Exploitation of Earth's natural resources is currently an essential condition of human existence. However, accelerated economic growth with high consumption level in developed countries and aspirations of developing countries to reach matching levels of growth are continuing to damage our Planet Earth's environment. Conservation of biodiversity has been possible in many ways. A survey on the sacred groves and sacred trees in and around Karungulam area, Tuticorin district was made. Tree worship is a common practice of Hindu religion in India. Such trees are usually preserved by the people out of fear & religious sentiment. In the present survey, it was observed that 8 temple harbour sacred groves and 5 temple as a sacred trees. Since most of these preserved, the plant species with its medicinal value.

Keywords: Sacred groves, Biodiversity, Conservation, Exploitation.

Introduction

India is among the 12th mega biodiversity countries in the world having 25 hot spots of the richest and highly endangered eco-region of the world (Myers *et al.* 2000). Due to increasing pressure of population, degradation and depletion of forests, it remains a challenging task to manage forests in a sustainable manner. India is classified under one of the low forest cover countries and account for 23.8% of total geographical area of the country (FSI Forest Survey of India (2005)). The concept and beliefs of sacred trees and groves of forests are one of the best practices to conserve the natural resources. Sacred groves (SGs) are small forest areas that are left untouched by the local inhabitants to be conserved by the local village folk deities and are of special spiritual significance to them. Sacred groves, also known as church forests, fetish forests and sacred forests, are found all over the world including Ethiopia, Japan, Morocco, India, and Ghana (Cardelús *et al.* 2013). Around 1,00,000 to 1,50,000 sacred groves are reported in India (Malhotra *et al.* 2007). Different scientific

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NATIONAL SEMINAR ON BIOPOLYMERS

(MSBP-2018)

19 SEPTEMBER, 2018

Organised by

THE RESEARCH DEPARTMENT OF MICROBIOLOGY
(Unaided)

Editors

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

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ON
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EVALUATION OF ANTIBACTERIAL ACTIVITY OF MEDICINAL PLANT

Pouzolzia wightii Benn. LEAF EXTRACTS

M. SYED ALI FATHIMA* and M. JOHNSON**

**Centre for Plant Biotechnology, Department of Botany, St. Xavier's College
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011.

ABSTRACT

In many countries medicinal plants play a vital role in health care provision and they have been used for treatment of numerous diseases for thousands of years. Plants are used as a source of medicinal agents for antibacterial, antihelminthic, astringent, emetic, febrifuge, sedative and stimulant. Many higher plant species possess a novel source for new drugs and are still largely unexplored. *Pouzolzia wightii* is a shrub which belongs to the family of Utricaceae. *Pouzolzia wightii* is widely distributed in the Southern Western Ghats (Tamilnadu and Kerala). The different parts of *Pouzolzia wightii* are useful for anti-inflammatory, wound healing, ulcers and boils. Due to advancement in science and technology, remarkable progress has been made in the medicinal field, with the natural and synthetic drug discovery. With this background this present study was intended to screen the antibacterial potential of *Pouzolzia wightii* leaves with five different extracts. The result of the present study showed the presence of wide spectrum of antibacterial activities against *E.Coli* (16.10mm) followed by *K. pneumonia* (16.03) in *Pouzolzia wightii* leaves ethanolic extracts. Further research on the isolation of active principles from *Pouzolzia wightii* may leads to find an alternative medicine with antibacterial property.

KEYWORDS: Antibacterial activity, medicinal plants.

INTRODUCTION

In many countries medicinal plants have vital roles in the healthcare provision and they have been used for the treatment of numerous major human health diseases for thousands of years (Latheef *et al.*, 2008 and Munshi and Osman, 2014). Plants naturally produce a variety of chemical constituents to protect themselves against a variety of pathogens (Enne *et al.*, 2001; Westh *et al.*, 2004). Plants have the best source of drugs (Wolabi *et al.*, 2007). Different drugs are obtained from the different parts of the medicinal plants such as stem, root, flowers and fruits (Mahesh and Satish, 2008 & Abdel *et al.*, 2012). Leaves are also used for the therapeutic purpose. It is being used as resource of medicinal agents for antibacterial, anti helminthic, astringent, emetic, febrifuge, sedative and stimulant. Natural products moreover as pure compounds or as standardized plant extrats offer unlimited opportunities for new drug. Antibiotics supply the main basis for the therapy of bacterial infections (Tambekar and khante, 2010). Most of the biologically active metabolites are synthesized from secondary metabolic pathways by the medicinal plants during the vegetative phase. Compounds are dependable for the therapeutic properties of the medicinal plants (Silva *et al.*, 1996). Several medicinal plants include antimicrobial activities

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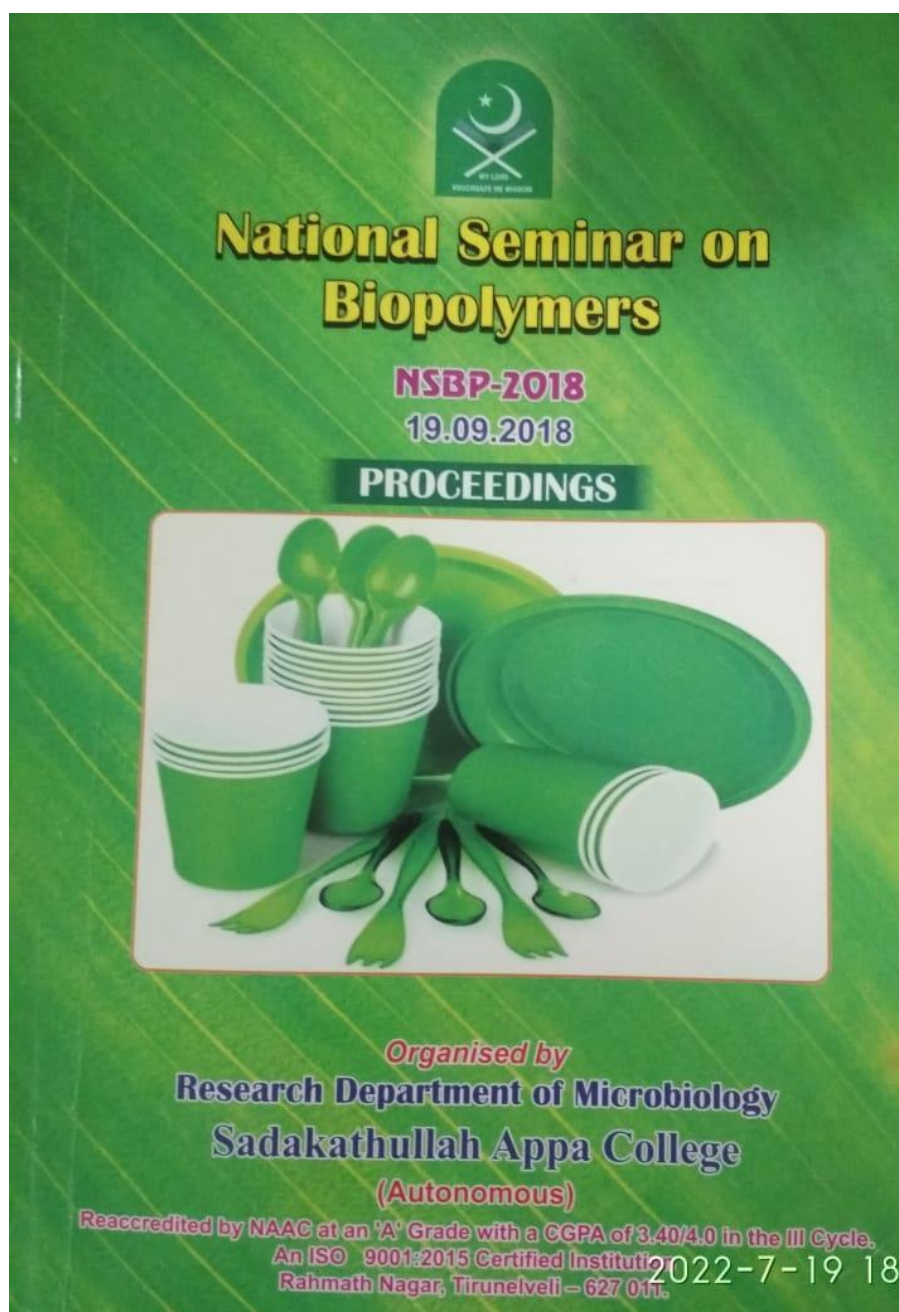
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PREVALENCE OF INFECTIOUS DISEASES IN TIRUNELVELI

AUTHORS: Raja Pavithra.P (2nd B.Sc student)

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INTRODUCTION

Nowadays, about 70 percent of the bacteria that cause infections are resistant to at least one of the drugs most commonly used for treatment. Some organisms are resistant to all approved antibiotics and can only be treated with experimental and potentially toxic drugs. Evolutionist, (Colin Patterson, 1978) commented that the development of antibiotic resistance is one of the most cited modern examples of evolution. An alarming increase in resistance of bacteria that cause community acquired infections has also been documented, especially in the staphylococci and pneumonia.

Antibiotic-resistance bacteria are a growing public health threat worldwide, and the World Health Organization estimates the total cost of treating all hospital-borne antibiotic-resistant infections is about \$10 billion a year. An estimated 14,000 deaths every year are blamed on drug-resistant bacteria common in U.S. hospitals. The solutions to the problems of anti-microbial resistance are a direct consequence of understanding the mechanisms at the basis of its emergence.

Antibiotics must be known in order to successfully fight the resistant or multi-resistant bacteria MDR-"multidrug resistance". Bacteria can have a natural resistance to an antibiotic, meaning they can grow and multiply in the presence of maximum concentrations of antibiotics tolerated by the body, their development not being influenced by that drug in any way. A survey can help to understand the emergence of disease among people.

BACTERIAL EXAMINATION OF NOSOCOMIAL WOUND INFECTIONS

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*ASSISTANT PROFESSOR, **ASSOCIATE PROFESSOR,
*** 2ND YEAR B.sc STUDENT

DEPARTMENT OF ZOOLOGY SADAKATHULLAH APPA COLLEGE RAHMATH
NAGAR, TIRUNELVELI.

INTRODUCTION:

Wound infections and abscesses occur as complications of surgery, trauma, or disease that may interrupt a mucosal or skin surface. Infections may occur whenever a laceration or other types of wound is contaminated with pathogenic microorganisms. Wounds can be contaminated from the skin, from various other sources such as soil, clothing, faeces or aerosols. It should be recognized that surgical incisions are also wounds and can become contaminated giving rise to post operative infections which involve Nosocomial pathogens such as staphylococcus aureus, Klebsiella, Enterobacter, Pseudomonas aeruginosa. The contaminants are at first generally present in relatively small numbers. The infections sets in when one or more of the contaminants invade the site, multiply in large numbers, attach and harm the host.

Nosocomial infections is applied to any clinical infection that is to say, infection causing illness that are neither present nor in its incubation period at the time of hospitalization. The commonest – pyogenic bacteria are Staphylococcus aureus, Streptococcal pyogens, Pneumococci and coiliform bacilli such as E.coli, proteus species and P.aeruginosa and anerobic Clostridium species may be imp in infections of wound specially abdominal wounds, soiled deep wounds and whenever devitalized tissue provided suitable aerobic conditions.

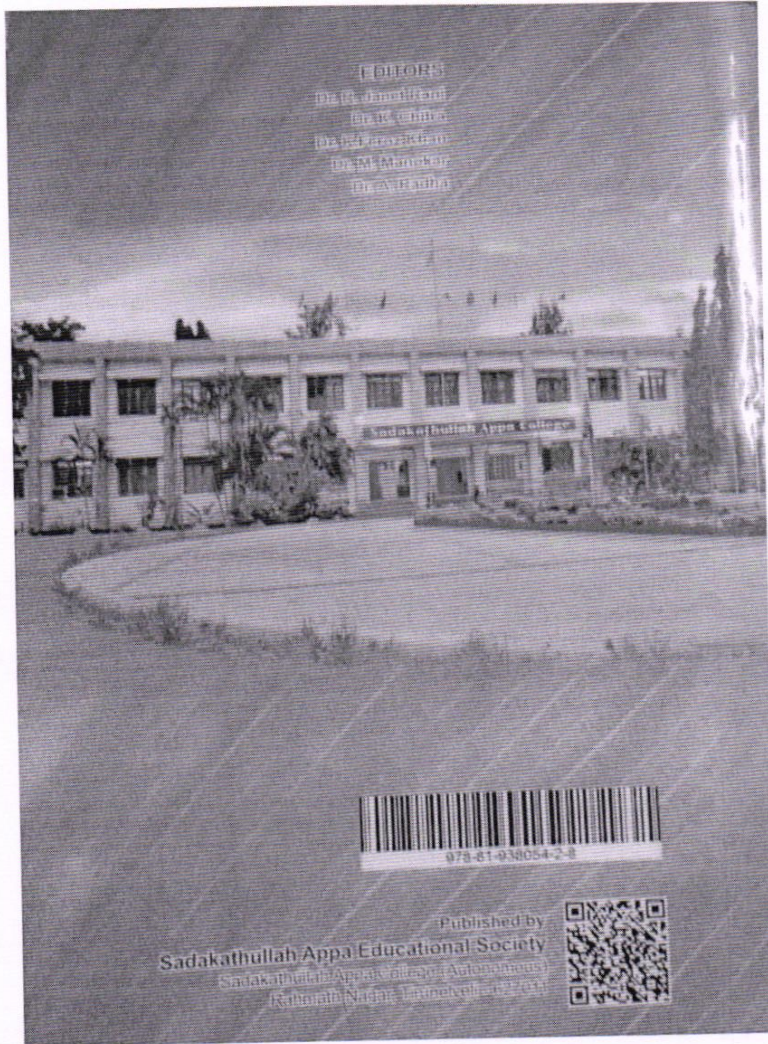
Wounds in skin or mucous membrane invite the entrance of bacterial either parasites from the body surface coming directly or indirectly from the soil. Wounds are visible results of individual cell death or damage and can be classified by size, site, depth and causation surgery, accident or circulatory failure etc.

Over the past twenty years significant changes in the microbiology ecology of the burn would have been noted.

COMMON MICROBIAL ETIOLOGY :

AEROBES:

- ☐ Staphylococcus aureus
- ☐ Streptococcus pyogenes




Principal

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