AY 2017-18 : Collaborative quality initiatives with other institution(s)

The following are the list of publications and MoU's for Qualitative Assurance Initiatives of the Institutions during the academic year 2017-18:

S. No.	Details	No of Publications /MoU's
1	Publications	19
2	MoU's	05

28/1/22

(Prof.Dr.V.Rajendran)
Principal

Prof. Dr. V. RAJENDRAN
M.Sc.,M.Phil.,MTech.,(Nanotech),Ph.D.,FinstP(London)
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Publications

S. No.	Publication Details	Collaborative Institute	Name of the author/s	Department of the teacher	Name of journal	Year of publication	ISBN/ IS SN number
1	Experimental and theoretical perspectives on 2-amino 5-bromopyridinium salicylate: a third order nonlinear optical material	PSG College of Arts and Science, Coimbator e	Dr.R. Karunatha n	Physics	J Mater Sci: Mater Electron in Springer	2017-2018	0957-4522
2	Semiconducting Metal Oxides for Gas Sensor Applications	Loyola College, Chennai, Women's Christian College, Chennai	Dr.P. Sakthivel	Physics	J Mater Sci: Mater Electron	2017-2018	0957-4522 (Print) 1573-482X (Online)
3	In vitro cytotoxicity testing of biosynthesised silver nanoparticle of *Andrederacordifol ia* in Prostate Cancer Cells(PC-3)	Bharathiar University, Coimbator e	Mrs.K. Rajathi, Dr.N. Kannikapara meswari and Mrs. S. Suja	Biochemistry	European Journal of Pharmaceuti cal and Medical Research	2017-2018	0957-4522
4	Biomimetic synthesis, characterization and evaluation of antioxidant, antimicrobial efficacy of silver nanoparticles using *Anredera cordifolia* leaf extract	Bharathiar University, Coimbator e,	Mrs. K.Rajathi.and S.Suja	Biochemistry	Asian Journal of Pharmaceuti cal and Clinical Research	2017-2018	0957-4522 (Print) 1573-482X (Online)

5	*In vitro* antifungal activity of Pterocarpus marsupium used among tribal communities of Western Ghats, Coimbatore, Tamil Nadu.	Rathnavel Subramaniam College of Arts and Science, Coimbator e	Prof.**Joseph Devakumar**,	Microbiology	Journal of Pharmacy Research	2017-2018	4&9
6	*In vivo* antiplasmodial activity of medicinal plants used in pyrexia among ethnic communities of Western Ghats, Coimbatore, Tamil Nadu	Rathnavel Subramaniam College of Arts and Science, Coimbator e	Prof.**Joseph Devakumar**,	Microbiology	Journal of Pharmacy Research	2017-2018	9&2
7	A Graph based similarity measure(GBSM) for finding the sematic relation between between the words in microblogs	Chikkanna Governme nt Arts College, Tirupur	Mrs. K.Suguna	Computer Applications	International Journal of Applied Engineering Research	2017-2018	0973-4562
8	A Literature Review on Supervised Machine Learning Algorithms and Boosting Process	Dr. SNS Rajalaksh mi College of Arts and Science, Coimbator e	Dr. V. Jaiganesh	Computer Science	International Journal of Computer Applications	2017-2018	169(8):3 2-35
9	Investment Pattern of Middle Class Families income- A study with Special reference to Coimbatore City.	VLB Janakiamm al College of Arts and Science	Dr.P. Shanthini	Commerce Banking and Insurance	International Journal of Basic and Applied Research	2017-2018	E-ISSN 2278050 5

10	Impact of Cashless Economy on Common Man in India	Dr. SNS Rajalakshmi College of Arts and Science College	Dr.B.P. Banudevi	B.Com-Finance	shanlax International Journal of Commerce	2017-2018	2320-4168
11	An analysis of Creditworthiness towards Borrowing and Commitment Level of Micro & Small Enterprises in Rural Areas	Excel Business School, Pallakapalayam	Mr.S.N. Selvaraj	BBA (CA)	EPRA International Journal of Economic and Business Review	2017-2018	2349-0187 (Print) 2347-9671 (Online)
12	Biocontrol of Aspergillus root rot by tripartite symbiosis in groundnut	GRI-Deemed University, Gandhigram	Mr. MN. Ramachandran	Microbiology	International Journal of Advanced Research in Biological Sciences	2017-2018	2348-8069
13	Survey on web contents, web mining and page ranking	Sri Ramakrishna College of Arts and Science	Ms.V. Jayashree	Computer Science	International Journal of Advanced Research in Science and Engineering	2017-2018	2319-8354
14	In vitro Phytochemical, Antioxidant and Cytotoxic Evaluation of Syzygium jambosL. (Alston)	Rathnavel Subramaniam College of Arts and Science, Coimbatore	Prof. Joseph Devakumar	Microbiology	Journal of Pharmacy Research	2017-2018	0974-6943
15	Bioprospecting of marine sponge (Callyspongia diffusa) for antibacterial compound.	CMS College of Science and Commerce, Coimbatore,	Dr.D.Geetharamani	Microbiology	Asian Journal of pharmaceutical and clinical research	2017-2018	0974-2441

16	Extracting Textual Information from Google Using Wrapper Class	Government Arts College for Women, Dharmapuri	Dr.A.Muthuswamy	Computer technology	Science publishing group	2017-2018	2326-9766
17	A study on customer's awareness on green banking initiatives in selected private sector banks with special reference to coimbatore city	Dr.SNS Rajalakshmi college of arts and science,Coimbatore	Dr.P.B.Banudevi	Commerce Finance	India financial division-Challenges and benefits	2017-2018	9789352880021
18	Consumer Buying Behaviour towards Organic Foods in Coimbatore Region	Dr.SNS Rajalakshmi college of arts and science,Coimbatore	Dr.P.B.Banudevi	Commerce Finance	International conference on Emerging trends and innovative strategies in social media marketing	2017-2018	9789352880034
19	The Major Factors Influencing Parents Buying Behaviour of Children Products	Sree Narayanan Guru College			Researchers world; Journal of Arts, Science & commerce	2017-2018	2231-4172

J Mater Sci: Mater Electron
DOI 10.1007/s10854-017-6718-8

Experimental and theoretical perspectives on 2-amino 5-bromopyridinium salicylate: a third order nonlinear optical material

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Received: 7 January 2017 / Accepted: 7 March 2017

Abstract Organic charge–transfer complex of 2-amino 5-bromopyridinium salicylate (2A5BPSA) single crystals were grown by slow evaporation solution growth technique using methanol as a solvent. The phases and functional groups of 2A5BPSA have been identified and confirmed through powder X-ray diffraction and Fourier transform infrared. The optical transmittance window and the lower cutoff wavelength of the 2A5BPSA have been identified by UV–Vis–NIR studies. Dielectric studies were carried out for the grown crystals at various temperatures from the frequency ranging from 50 Hz to 5 MHz. Photoconductivity and microhardness studies were also performed for the 2A5BPSA crystal sample. The nonlinear refractive index, nonlinear absorption coefficient have been measured through the Z-scan technique. In addition to that, the quantum chemical calculations on 2A5BPSA have been performed by density functional theory calculations using Hartee–Fock method with HF/6-311++G basis set.

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Published online: 19 March 2017

1 Introduction

A fascinating new field of research termed "nonlinear" optics was introduced to the scientific and engineering community after the invention of laser. Nonlinear optics has arisen as one of the most attractive fields of current research in view of its vital applications in areas of optical switching, optical data storage for the developing technologies in telecommunications, frequency mixing, optical parametric oscillation, optical bi-stability, optical logic gates, laser radiation protection, optical image processing, under water communication, biomedical and signal processing analysis optical modulation, second-harmonic generation (SHG), third-harmonic generation (THG) optical signal processing, optical switching, optical data storage devices, frequency shifting, optical modulation, optical switching, optical logic, and optical memory for the emerging technologies in areas such as telecommunications, signal processing and optical interconnections. It is also used in phase conjugation and image reconstruction etc [1–3]. It has been understood that the molecular nonlinearity can be enhanced by large delocalized π-electron systems with strong donor and acceptor groups. The π acceptor charge–transfer (CT) reactions have been employed positively in pharmaceutical investigation. Therefore CT complexes encouraged widespread research on these kinds of complexes [4, 5]. Moreover, the field of non-linear optical materials and electrical conductivities finds the application of such complexes. For these extensive applications, more works on charge-transfer complexes have been carried out. The CT complexes of organic materials are considered for the reason that the special type of interaction is accompanied by transfer of an electron from the donor to the acceptor. Similarly, the protonation of the donor from the acidic acceptors are basis for the construction of ion pair materials. Pyridine and its

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Semiconducting metal oxides for gas sensor applications

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Abstract The present paper reports the synthesis of the semiconducting metal oxides of tin, copper and zinc via a facile hydrothermal route. By the X-ray diffraction technique the as-synthesized materials are investigated and its crystal properties are characterized.The AC conductivity of the metal oxides are determined in the ambient and cigarette smoke environment. The results show, besides the conventional method of testing the sensitivity of the metal oxides, the dielectric analysis is a versatile method for determining potentially suitable candidates for sensing applications.

1 Introduction

The essence of nanoscience and nanotechnology is to understand, fabricate and engineer materials and devices in the nanometer regime which is considered an enabling technology by which existing materials can acquire different properties rendering them suitable for numerous novel applications varying from structural to functional [1–3]. The research of such nanomaterials have broadened vastly encompassing a variety of systems including one-dimensional, two-dimensional, three-dimensional and amorphous materials made of distinctly dissimilar components and mixed at nanometer scale [4–6]. They have also encompassed matrix of nanoparticles of two or more elements or compounds, having increasing structural sophistication with enhanced properties, triggering interests among researchers over the globe. The field is escalating, with the ability to tailor nanosized materials of heterogeneous chemical species into applications which show potential and promise as it covers multidisciplinary areas of research such as gas sensors [4, 7–10], photocatalysis [8–14], lithium ion batteries [15–17], antibacterial activity [4, 18–20], drug delivery [21], aerospace [22], supercapacitors [23–25], coatings [26, 27] and many more.

Metal oxides constitute a diverse and fascinating class of materials whose properties cover the entire range from metals to semiconductors and insulators. Considering some of the reasons that make oxides of technological interest, is that they determine in large measure what properties are studied [28]. Metal oxides are currently being exploited and enhanced in many ways so as to improve their efficiency and thereby improve their role in the areas of Physics, Chemistry and Material science. The increasing use of metal oxides by incorporating them into a range of products has amplified the pressing need to gather more information about these materials, thereby attracting researchers and making them plunge deeper into their properties and obtain results, which would be the key factors for designing and interpreting this form of nanoparticles [29–32].

Metal oxides exhibit a range of electrical transport properties, from metallic to insulating to superconducting. The introduction of point defects generally affects all types of electrical transport. The increase in conductivity requires acceptors near the valence band. Many defect-rich oxide materials are found to exhibit n-type conductivity, pointing to an abundance of excess electrons associated with the defects. Oxygen vacancy sites, which normally act as electron donors are a possible point defect in all metal oxide

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IN VITRO CYTOTOXICITY TESTING OF BIOSYNTHESISED SILVER NANOPARTICLE OF ANDREDERA CORDIFOLIA IN PROSTATE CANCER CELLS (PC-3)

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ABSTRACT
Silver nanoparticles because of their interesting characteristics are currently the most widely used nanoparticles. One of the interesting properties is that they display antimicrobial activity. Concomitantly they exert cytoprotective effect on human cells. It is of interest to validate and analyse this property. In the present study, silver nanoparticles were synthesised with particle size between 40-60nm in diameter. These were then used to analyse their uptake and consequent cytotoxic effects on Human Prostate cancer cells (PC-3). The formation of Ag-NPs was confirmed by UV-Visible Spectroscopy, X-Ray Diffraction (XRD) pattern, Scanning Electron Microscopy (SEM) and Transmission Electron Microscopy (TEM). The synthesized Ag-NPs were predominately spherical in shape and polydispersed. Fourier Transform Infra-Red (FT-IR) spectroscopy analysis showed that the synthesized nano-Ag was capped with bimolecular compounds which are responsible for reduction of silver ions. The AgNPs showed potent cytotoxic activity against the human prostate cancer (PC-3) cell line at higher concentrations.

KEYWORDS: Cytotoxic effect, PC-3 cell line, silver nanoparticle,*Andredera cordifolia*,Cell viability,etc

INTRODUCTION

Carcinogenesis is a complex and multi-step process in which distinct molecular and cellular alterations occur. A cancer chemopreventive agent could be effective at any of these defined stages of carcinogenesis: initiation, promotion, progression.[1, 2] The preventive mechanisms of tumor promotion by natural phytochemicals range from the inhibition of genotoxic effects, increased antioxidant and anti-inflammatory activity, inhibition of proteases and cell proliferation, protection of intercellular communications to modulation of apoptosis and signal transduction pathways [3]

Prostate cancer is the most common non-cutaneous solid cancer occurring among men in the USA. The most recent estimates from the American Cancer Society. [4] showed that about 240,890 new cases of prostate cancer would be diagnosed in 2011, with 33,720 deaths attributable to prostate cancer in the United States alone. About one of six males in the U.S. may be afflicted with this cancer, and the risk is increased drastically for older males. Moreover, the risk of death due to metastatic prostate cancer is 1 in 36. Genetics, age, race, diet, and family history, and even lifestyle may all contribute to prostate cancer risk.[5] The treatment options for prostate cancer are surgery, chemotherapy, cryotherapy, hormonal therapy and/or radiation, but all are only beneficial at the early stages, with no significant effects after metastasis. Therefore, there is a high need for treatments that will stop the metastasis and invasion of prostate cancer cells.

Rapidly developing field of nanoscience had raised the possibility of using therapeutic nanoparticles in the diagnosis and treatment of human cancers [6]. Nanoscale particles and molecules are a potential alternative for treatment of disease because they have unique biological effects based on the structure and size, which differ from traditional small molecule drugs.[7]

The role of silver nanoparticles as an anticancer agent should open new door in the field of medicine. Silver nanoparticles should serve as one of the best ways of treating diseases that involve cell proliferation and cell death.[8]

The cytotoxic effects of silver are the result of active physicochemical interaction of silver atoms with the functional groups of intracellular proteins, as well as with the nitrogen bases and phosphate groups in DNA.[9.]

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Research Article

BIOMIMETIC SYNTHESIS, CHARACTERIZATION AND EVALUATION OF ANTIOXIDANT, ANTIMICROBIAL EFFICACY OF SILVER NANOPARTICLES USING *ANREDERA CORDIFOLIA* LEAF EXTRACT

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ABSTRACT

Objective: This study is focused on the biosynthesis of silver nanoparticles (AgNPs) using aqueous extract of *Anredera cordifolia* and to investigate the free radical scavenging potential, antimicrobial activity of the nanoparticles against different human pathogens.

Methods: The formation of AgNPs was indicated by the color change from colorless to reddish brown. Biosynthesized AgNPs were characterized using several techniques, *viz.,* ultraviolet (UV)-visible spectroscopy, Fourier transform infrared, X-ray diffraction (XRD), transmission electron microscopy (TEM), scanning electron microscopy (SEM), and energy dispersive X-ray analysis. The free radical scavenging potential was measured by 2, 2-diphenyl-1-picrylhydrazyl (DPPH), ferric reducing antioxidant power (FRAP) assay, antimicrobial activity against six microorganisms was tested using disc diffusion method.

Results: UV-visible spectral analysis showed silver surface plasmon resonance band at 426 nm. The crystalline morphology and size of the nanoparticles were determined by TEM, SEM, and XRD studies which showed the average size of the nanoparticles in the range 40-60 nm. The biologically synthesized nanoparticles efficiently inhibited pathogenic organisms such as *Escherichia coli*, *Staphylococcus aureus, Klebsiella pneumonia*, *Pseudomonas aeruginosa,* and *Proteus vulgaris.* The biosynthesized nanoparticles might serve as a potent antioxidant as revealed by DPPH assay and FRAP assay.

Conclusion: The biosynthesis of AgNPs had several advantages in pharmaceutical applications as well as large-scale commercial production.

Keywords: Silver nanoparticle, *Anredera cordifolia* leaf, Scanning electron microscopy, Transmission electron microscopy, X-ray diffraction, Antioxidant, Antimicrobial.

 DOI: http://dx.doi.org/10.22159/ajpcr.2017.v10i4.16819

INTRODUCTION

Nanotechnology can be termed as the synthesis, characterization, exploration, and application of nanosized (1-100 nm) materials for the development of science. The intrinsic properties of metal nanoparticles are determined by size, shape, composition, crystallinity, and morphology. It is a field of science which deals with production, manipulation and use of materials ranging in nanometers. In nanotechnology nanoparticles research is an important aspect due to its innumerable applications. The nanoparticles have a wide range of applications, as in combating microbes [1], biolabeling [2], and in the treatment of cancer [3]. The antibacterial activity of silver species is known since ancient times [4] and it has been demonstrated that, at low concentrations, silver is nontoxic to human cells [5]. It has also been reported that Ag^+ ions uncouple the respiratory chain from oxidative phosphorylation or collapse the proton-motive force across the cytoplasmic membrane [6]. The interaction of Ag^+ with bacteria is directly related to the size and shape of the nanoparticles [7].

The research in nanotechnology highlights the possibility of green chemistry route to produce technologically valuable nanomaterials. In recent times, prevalence resistance to antimicrobial agents has emerged as a major health problem [8]. Biosynthesis of metallic nanoparticles is an eco-friendly process in the field of applied nanotechnology [9].

Among all metal-nanoparticles, silver nanoparticles (AgNPs) exhibit tremendous applications in spectrally selective coatings for solar energy absorption, optical receptors, biolabeling, intercalation materials for electrical batteries, filters, antimicrobial agents, and sensors [10]. AgNP-embedded antimicrobial paint [11] is a promising area of ecofriendly applications. Hence, a variety of techniques including physical and chemical methods have been developed to synthesize AgNPs, the physical methods [12] are highly expensive and chemical methods are harmful to the environment [13]. Therefore, there is a growing need to develop environmentally benign nanoparticle synthesis processes that do not use toxic chemicals in the synthesis protocols.

It is generally recognized that AgNPs may attach to the cell wall, which disturbs cell-wall permeability and cellular respiration. The nanoparticles may also penetrate inside the cell causing damage by interacting with phosphorus and sulfur containing compounds such as DNA and protein. Another possible contribution to the bactericidal properties of silver particles is the release of silver ions [14].

Many researchers demonstrated the green synthesis of AgNPs including bacteria, actinomycetes, fungi and plants. Whereas, the plant materials have been successfully applied for AgNPs synthesis, due to its potential medicinal property, availability, possibility of faster rate of synthesis and may also reduce the steps in downstream processing, thereby making the process cost efficient [15,16].

This study was designed with a simple, cost-effective, and environmentally synthesis method of AgNPs at ambient conditions using *Anredera cordifolia* leaves as a reducing and stabilizing agent. In this study, we have explored the green synthesis of AgNPs using *A. cordifolia* leaf extract. Synthesized nanoparticles were characterized by ultraviolet (UV)-visible spectroscopy, X-ray diffraction (XRD),

Research Article

In vitro antifungal activity of *Pterocarpus marsupium* used among tribal communities of Western Ghats, Coimbatore, Tamil Nadu

Rangasamy Dhanabalan[1*], Subbu Balachandar[1], Joseph Devakumar[2]

ABSTRACT

Background: To investigate the *in vitro* antifungal activity of *Pterocarpus marsupium* leaf extracts used in folklore treatments among tribal community in the Western Ghats of Coimbatore district. **Methods:** The crude aqueous and organic solvent leaf extracts extracted by cold maceration method were subjected to antifungal activity against *Aspergillus flavus* and *Aspergillus fumigatus* by agar plate dilution method. **Results:** The methanol and ethanol leaf extracts of *P. marsupium* showed significant ($P < 0.01$) antifungal activity against *A. flavus* at an minimum inhibitory concentration of 31 µg/mL with IC_{50} values 114.04 and 169 µg/mL, respectively. Similar antifungal activity of 100% inhibition was exhibited by alcoholic leaf extracts against *A. fumigatus*. Besides, the chloroform leaf extracts showed 82.94% and 80.58% fungistatic activity against *A. fumigatus* and *A. flavus*, respectively. Comparable antifungal activity was also observed in other concentrations of alcoholic and chloroform extracts of *P. marsupium* against *A. flavus* and *A. fumigatus*. The aqueous leaf extract did not show demonstrable antifungal activity against the two fungal strains used in the assay which was not up to the score. **Conclusion:** The methanolic and ethanolic leaf extracts of selected plants were more active against tested fungal strains when compared to the chloroform and aqueous extracts. Further investigations are mandatory to identify the antifungal compounds present in the chosen herb.

KEY WORDS: Antifungal, aspergillosis, bronchopulmonary, folklore, mycosis

INTRODUCTION

Dissemination of fungal spores is a major problem in the spread of spore derived allergic pulmonary diseases. In temperate and tropical climates *Aspergilli* are well-recognized causes of allergic bronchopulmonary infections. Aspergillosis has been recorded in India, regularly in tropical areas with the development of fungus ball and pulmonary cavitation in patients, causing severe hemoptysis secondary to tuberculosis.[1] A type of aspergillosis called Farmer's Lung infection is a housing of mold spores in pulmonary cavities among paddy field agrarians involved in farming practices. Farmworkers in Narasipuram, Semmedu, and areas near Velliangiri foothills (Poondi) of the Western Ghats, Coimbatore, are the chief cultivators of grains and sugarcane.[2] The husk, hay, and other grain debris are the major growth substrates of Aspergillus species, and frequent exposer of these field workers during harvesting of crops is frequently prone to farmer's lung Aspergillosis infection. Treatment of such fungal infections should be considered with utmost consequence due to the emergence of antifungal resistance, if untreated which may be chronic leading to morbidity and sometimes fatal among the community.

As fungal infections with multidrug resistance have posed a great problem in tropics and the availability of antifungal is lesser compared to antibacterial agents, a search of alternative antifungal agents is a mandate with null side effects. Phototherapy is an arena practiced among the folklore traditional healers for various diseases and disorders. From time immemorial, traditionally phytotherapy information has been conceded as oral communication from generation to generation. Among secondary metabolites from herbal sources plant polyphenolics, essential oils, terpenoids, saponins, alkaloids, peptides, and proteins were evidenced to be natural antifungal compounds

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Research Article

In vivo antiplasmodial activity of medicinal plants used in pyrexia among ethnic communities of Western Ghats, Coimbatore, Tamil Nadu

Rangasamy Dhanabalan*, Subbu Balachandar, Joseph Devakumar, Babyraj Sreeraj, Jayasanker Nambiar Chandni

ABSTRACT

Background: Four folklore medicinal plants *Achyranthes aspera, Argemone mexicana, Myristica fragrans, and Pterocarpus marsupium* leaf extracts were investigated for their antiplasmodial activity in *Plasmodium berghei* infected Swiss albino mice model. **Methods:** The *in vivo* antiplasmodial activity was carried out adopting classical Peter's 4-day suppressive test, and Rane's Curative assay. **Results:** Peter's four day test confirmed the significant parasite suppression 97.72% (P<0.001) in chloroquine (CQ) control prolonging the mean survival time of animals for 32 days. In Peter's four day test the extracts PMMLE, AMMLE and AMCLE exhibited a leading parasite suppression of 81%, 76.13%, and 73.86% respectively. The antiplasmodial extracts AMMLE, AMCLE, AAMLE, PMMLE and PMCLE screened from the suppressive test subjected in the curative assay revealed notably significant parasite suppression of 74.2% Peter's four day test (P<0.001) in PMMLE at 400 mg/kg b.wt, whereas the extracts PMCLE and AMMLE at 400 mg/kg b.wt disclosed dose dependent suppressive effect of 60.8%, and 55.43% respectively compared to all other extracts subjected. Three extracts PMMLE, PMCLE and AMMLE screened from curative assay were subjected in prophylactic test, where PMMLE was found to be potential in defeating parasites >50% at a dose level of 200 and 400 mg/kg b.wt with 57.23% and 77.23% achieving a statistical significance P<0.01. The other extract PMCLE exposed 59.21% parasite suppression at 400 mg/kg b.wt with a significance P<0.05, whereas the AMMLE did not express significant parasite suppression compared to other extracts subjected in the assay. **Conclusion:** The present investigation establishes, the selected plant species were effective in assorted range of antiplasmodial activity and could be a potential source in antimalarial drug discovery.

KEY WORDS: Antiplasmodial activity, Apicomplexan, Chemosuppression, *Plasmodium berghei*

INTRODUCTION

Among top three parasitic infections, malaria stands as a major health concern worldwide. In the developing countries, eradication of malaria still remains as a major health concern due to the resistance of mosquito vectors disseminating the infection among human host. The treatment regimen and purge of malaria poses a great problem worldwide due to the emergence of drug-resistant parasites. A fact sheet of world malaria report 2017 states, in 2016, there were an estimated 216 million cases of malaria, an increase of about 5 million cases over 2015. Malaria deaths reached 4, 45,000 estimating on data from 91 countries and areas with ongoing malaria transmission. The world malaria report also states that the countries with weak malaria surveillance systems include India and Nigeria, two major contributors to the global burden of malaria, with 8% and 16% of cases, respectively, detected by the surveillance system.[1]

Malaria apicomplexan parasite has emerged with resistance for conventional antimalarial agents and its incessant epitope change limited the success of malarial vaccines. Plants are veritable sources for their valuable phytometabolites being considered in the therapy and remedy of several ailments. For the past few decades in the field of medication, an upsurge in phototherapy has been recognized for safe treatment with nil side effects. Among different plant species *Achyranthes aspera, Argemone mexicana, Myristica fragrans,* and *Pterocarpus marsupium* are the folklore medicinal plants used between tribal

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A Graph Based Similarity Measure (GBSM) for Finding the Semantic Relation between the Words in Microblogs

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Abstract-

This paper introduce a new graphics model for micro blogs to understand the mostly inference topics. The twitter deals with more than hundred billions of tweets per day, so it is not an easy task to find the recurrent topics. Twitter are the one of the leading social networking site where the people can share their arousing and opinion. The tweets are very petite text, noisy and unstructured. Tweets are constantly screening up with rich user-generated[1]. The constructs the semantic relationships to each other and also provides a way to connect the semantically related and co-occurred word. The proposed method Graph Based Similarity Measure (GBSM) define a topic model to avoid the sparseness of short text and noisy. This paper examines the problem of overlapping in nodes and edges of the Graph-Based Topic Model(HGTM).

Keywords: graph, Short text, Similarity Measure.

INTRODUCTION

Twitter is the most significant social networking service that spreads the information's worldwide. Twitter to be a rich and vast resource for data on the web. The content of the twitter should be well recognized because the people are using this as a platform to expose their reaction at instantaneous occasion. The text contents in tweets are diverse in nature, so it is necessary to predict the information which is frequently tagged. Most of the sentiment analysis is conducted on tweets with traditional algorithms. There are three key reasons to propose a new model :(i) the severe sparsity problem, (ii) models are designed for flat texts without structure,(iii)wide range of information conflicts with the assumption. The weakly-supervised information provided by s can build direct semantic relations between tweets so that the words in tweets have more complex topical relationships than in normal text.

RELATED WORKS

Notations and Definitions

A graph is an undirected graph, denoted as $G = (V,E)$, where nodes V are s from the dictionary $fhgh=1:H$ and edges $E = f(h, h`)g$ are obtained from co-occurrence relations between s in the explicit relationship. The edge $e_{hh`}$ is weighted based on the association weight between h and h`.

Removing of non-english character

Algorithm1:NaïveBayesclassifier (Landid.py)

```
Langid/train/Nbtrain.py
Shutil.rmtree(outdir)
Except NameError:
        Pass
Except OSError
//clean up non-english characters.
defsetup_pass_tokenizer, b_dirs,sample_count, sample_size, term_freq, line_level);
```

LDA(Latent Dirichlet Allocation) Algorithm

LDA represents documents as mixtures of topics that create words with certain probabilities. The documents are provided in such a way that,

(i) Find the number of words N in the document,

(ii) Find the fixed set of topics K,

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A Literature Review on Supervised Machine Learning Algorithms and Boosting Process

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ABSTRACT
Data mining is one amid the core research areas in the field of computer science. Yet there is a knowledge data detection process helps the data mining to extract hidden information from the dataset there is a big scope of machine learning algorithms. Especially supervised machine learning algorithms gain extensive importance in data mining research. Boosting action is regularly helps the supervised machine learning algorithms for rising the predictive / classification veracity. This survey research article prefer two famous supervised machine learning algorithms that is decision trees and support vector machine and presented the recent research works carried out. Also recent improvement on Adaboost algorithms (boosting process) is also granted. From this survey research it is learnt that connecting supervised machine learning algorithm with boosting process increased prediction efficiency and there is a wide scope in this research element.

Keywords
Data mining, machine learning, research, adaboost, support vector machine, decision trees.

1. INTRODUCTION
Machine learning shortly describe as ML is a kind of artificial intelligence (AI) which compose available computers with the efficiency to be trained without being veraciously programmed. ML learning interest on the extensions of computer programs which is capable enough to modify when unprotected to new-fangled data. ML algorithms are broadly classified into three divisions namely supervised learning, unsupervised learning and reinforcement learning and is shown in Fig.1. The evolution of machine learning is comparable to that of data mining. Both data mining and machine learning consider or explore from end to end data to assume for patterns. On the other hand, in choice to extracting data for human knowledge as is the case in data mining applications; machine learning generate use of the data to identify patterns in data and fine-tune program actions therefore.

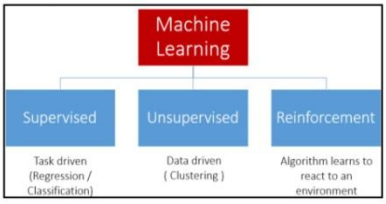

Fig.1. Machine Learning and its Types

Supervised machine learning is the mission of conceive a meaning from labelled training data which has a set of training examples. As far as supervised learning is concerned, every example is a mainstay containing an input object (which is usually a vector quantity) and a enforced output value (may also be referred as supervisory signal).

A supervised learning algorithm at first performs the analysis task from the practice data and constructs a contingent function, in order to map new examples. A maximum setting probably facilitates the algorithm to exactly courage the class labels for covered instances and the same needs the supervised learning algorithm to reduce from the training data to covered situations in a "rational" manner. The supervised methods are possibly used in various application areas that include marketing, finance, manufacturing, testing, stock market prediction, and so on.

1.1 Steps performed in the Supervised Machine Learning Algorithms
Step – 1: Establish the type of training examples. The user needs to courage the type(s) of data that will be used as a training set.

Step – 2: Converge a training set. The training set ambition to be delegate of the real-world use of the function. As a effort, a set of input objects is collected that remains and analogous outputs are also collected.

Step – 3: Resolve the input feature illustration of the learned function / learned attribute. The accurateness of the learned function is securely based on the input object is representation.

Step – 4: Resolve the formation of the learned function and comparable machine learning algorithm.

Step – 5: Assimilate the design and execute the learning algorithm on the collected training set.

Step – 6: Evaluate the accurateness / correctness of the learned function. Then, parameter adapt and learning may be performed on the resulting function and needs to be measured on a test data set that is break up from the training set.

1.2 Factors to be considered
1.2.1 Data Heterogeneity:
When the countenance vectors contains countenance of several kinds which includes discrete, discrete ordered, counts, continuous values, certain algorithms are simpler to implement than rest of the algorithms. Many such algorithms namely - Support Vector Machines, linear regression, logistic regression, neural networks, and nearest neighbour methods, desire that the input countenance be numerical and scaled to similar ranges.

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Investment Pattern of Middle Class Families income - A study with Special reference to Coimbatore City

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Abstract: Investment is the employment of funds on assets with the aim of earning income or capital appreciation. Investment is the most important things today. People are earning more, but they do not know where, when and how to invest it. A proper understanding of money, its value, the available avenues for investment, various financial institutions, the rate of return/risk etc., are essential to successfully manage one's finance for achieving life's goal. India is the best abode of investment opportunities both at micro and macro levels suitable to both urban and rural areas. The various efforts have been made by the Government and private individuals as well as institutions to encourage investment activities in identified areas in the interest of generation of output, income and employment opportunities. It is always noted point that the investment programme should be able to generate income as well as employment opportunities in the Indian Economy so as to eradicate poverty and hunger. In recent years one of the best efforts of the Government is initiation of Self-Help Group Programmed under rural development and poverty eradication programmes. Since woman is the equal partner and centre of development, she needs basic attention on her freedom and empowerment, socially, economically and politically. Effective Investment and mobilization of resources can be done in more fruitful way through the development of women-resource. For development of women-resource, there is need for global-friendly training to the women at large scale, particularly in rural areas.

Key Words: Investment, Indian Economy, Investment Opportunities.

Statement of Problem

In today's scenario investments have become a basic necessity for everyone. In India there is a rapid growth in investment. More number of investors is investing their funds in different types of investment opportunities. Investing wisely is a function if investors' specific needs and goals. Each investor has different objectives that need to be met depending on age, income and attitude towards risk. Investors have to work out with their investment profile to determine which investments are right for them and should consider important factors such as personal status, plans and constraints. Now a day the middle class segments investors select almost all kinds of investment avenues for their investment. They all improve the economic development of a country. Based on this conceptual understanding this study aims to analyse the investment pattern of middle class income families residing in Coimbatore city, Tamil Nadu.

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IMPACT OF CASHLESS ECONOMY ON COMMON MAN IN INDIA

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Abstract

The low literacy rates in rural India, along with the lack of infrastructure like internet access and power make things extremely difficult for people to adopt e-transaction route. The financial technology industry would be unwise to ignore the rise of mobile transaction services, person-to-person networks and the whole range of digital disruption in the payments arena from the likes of Bit coin, Apple Pay and PayPal that undoubtedly is putting pressure on cash. The present paper meets an attempt to know the awareness about smart phone and the use of smart phone in rural India. To overcome from the problem of cashless services providing in rural India.

Key words: *Cashless, Smart Phone, infrastructure, internet & networks etc.*

Introduction

Cash is like water a basic necessity without which survival is a challenge. Nevertheless, cash use doesn't seem to be waning all that much, with around 85% of global payments still made using cash. One of the main reasons is that there is nothing to truly compete with the flexibility of notes and coins. Of course, the digital era is something to embrace, and new methods of payments will continue to be introduced. But Indians need to recognize the risks and benefits of different payment instruments, the risks associated with electronic payment instruments are far more diverse and severe. Recently lakhs of debit card data were stolen by hackers; the ability of Indian financial institutions to protect the electronic currency came into question also an important reason why people favour cash. In a courageous move to combat black money and counterfeit currency, Narendra Modi's government scrapped currency notes of INR 500 and INR 1000 denominations, which is seen as an unprecedented measure, though a giant leap towards curbing corruption and forged currency. The declaration created confusion across the spectrum, as these high-value notes from around 86% of total legal tender. However, the whole isometrics of moving from cash-driven economy to cashless economy has somehow been assorted with demonetisation that was aimed to extract liquidity from the system to unearth black money. Prime Minister Narendra Modi acknowledged the fact in his monthly radio programme, 'Mann Ki Baat' on Sunday that making the transition to cashless economy is challenging, and hence has urged the public to move to 'lesscash' society. A report by Boston Consulting Group (BCG) and Google India revealed that last year around 75 per cent of transactions in India were cash-based, while in developed nations such as the US, Japan, France, Germany etc. it was around 20- 25 per cent. The depletion in cash due to demonetisation has pushed digital and etransactions to the forefront; e-banking, e-wallets, and other transaction apps becoming prevalent.

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EPRA International Journal of Economic and Business Review SJIF Impact Factor(2016) : 6.484
ISI Impact Factor (2013): 1.259(Dubai)

Research Paper

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AN ANALYSIS OF CREDITWORTHINESS TOWARDS BORROWING AND COMMITMENT LEVEL OF MICRO & SMALL ENTERPRISES IN RURAL AREAS

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ABSTRACT

The expansion and development of the enterprises depends on adaption of technology up-gradation in the existing mechanism. The enterprises engaged in business can utilize credit facilities provided by banks for the growth of business. Despite the commercial banking activities exist in all the parts of our country, the Micro and Small Enterprises located in rural areas are still facing problems for inadequate supply of credit to improve their businesses. Banks provide credit to these enterprises after analyzing their creditworthiness as the main part of their lending process in spite of credit risk which is often faced by rural banks. The five components of Creditworthiness are the determinants for sanctioning credit and also discriminating elements according to situation that prevails in the concerned market. The credit system and procedure used by rural banks is to measure the Creditworthiness of micro & small enterprises. The system helps the bankers to weigh the characteristics of the borrowers and conditions of the loan, attempting to estimate the chance of default. The objectives of the study are to measure the commitment level and the constituents of creditworthiness through statistical tools. It is observed after analyzing the creditworthiness that Cognizance is required more to know about the banking procedures in availing credit. The enterprises which do volume of business normally have capacity to repay credit when we compare to other enterprises. No enterprise bothers about their credit-score which is most important to provide credit facilities by rural banks. The capital is maintained according to nature of business and the age of enterprise that exist in the market. In connection with collateral no enterprise is ready to give or pledge the collateral to the bank while borrowing credit for their development of business.

KEYWORDS: *Creditworthiness, Enterprises, Borrowing, Commitment, Rural, Credit*

INTRODUCTION

The entrepreneurs make to grow their business which leads to overall growth of the economy to the extent possible. Further expansion and development of the enterprises depends on adaption of technology up-gradation in the existing mechanism. The enlargement by the way of modifying the current production system or replacing old system will definitely require an additional amount of investment. The enterprises engaged in business can utilize credit facilities provided by banks for the growth of business. Banks keep on lending money to all the sectors of industry and especially to those engaged in businesses in the form of Micro and Small enterprises. The major revenues made by banks are through the interest generated by lending and the charges or fee they charge for providing banking facilities to the business enterprises. Despite the commercial banking activities exist in all the parts of our country, the Micro and Small Enterprises located in rural areas are still facing problems for inadequate supply of credit to improve their businesses. Banks provide credit to these enterprises after analyzing their creditworthiness as the main part of their lending process in spite of credit risk which is often faced by rural banks.

MICRO & SMALL ENTERPRISES

The Government of India has been making intensive efforts for the promotion and development of micro & small enterprises which enabled to grow higher than the overall the growth of industrial sector. To facilitate the development of MSEs and increase their effectiveness, the government has enacted the Micro, Small and Medium Enterprises Development (MSMED) Act, 2006. One of the major policies

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Research Article

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Biocontrol of *Aspergillus* root rot by tripartite symbiosis in groundnut

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Abstract

Aspergillus niger is responsible for causing root rot of groundnut. Ten *A. niger* isolates were isolated and studied in the groundnut cultivated area of Madurai. Groundnut was challenged with *Aspergillus*, and the production of pectinase and cellulase enzymes was investigated to assess the virulence of the fungal isolates. Among the ten isolates *A. niger* CLR10 produced highest percentage (40%) of diseased plants. Based on the production of these enzymes in groundnut plants challenged with the pathogen *A. niger* CLR10 produced highest level of these enzymes so it was used for further studies. The treatment AT_{13} recorded minimum percentage mortality (15.9%) and the pathogen only inoculated control recorded 100% mortality. Application of AMF with rhizobial isolates decreased the mortality in groundnut. The biocontrol studies revealed that the combined inoculation of AMF and *Rhizobium* sp. reduced the pathogenesis of *A. niger* CLR10. However, the treatment AT_{13} recorded significantly ($p<0.05$ and 0.01) higher growth parameters than other treatments. The investigation suggested that inoculation of *Glomus mosseae* and *Gigaspora albida* along with *Rhizobium* sp.GPMK1 and GMDU1 can improve not only the growth but also render disease resistance to groundnut. It can be summarized that the practice of multiple inoculation is found more effective as compared to the traditional practice of single inoculation of inoculums.

Keywords: Root rot, *Aspergillus* sp.,Groundnut, *Rhizobium* sp., Biocontrol, Mycorrhiza.

Introduction

Groundnut is one of the major oilseed crops in India. It is cultivated under diversified agro climatic conditions in about 6.6 million hectare producing about 5.9 million tons (FAO, 2005). The yield is influenced by soil fertility, climatic condition, varieties grown, cultural practices, insect pests & diseases and environmental stresses.

In the early 1980s groundnut was grown in Uttar Pradesh on 0.3 million ha with a production of 0.19 million tons. Since then, both area and production have shown a steady decline due to various reasons. Groundnut is an exhaustive crop and depending upon the yield, it removes large amount of macro and micronutrients (Singh *et al*., 2008). Unfortunately, the groundnut production is hampered due to attack by different diseases. These include bacterial, fungal, nematode and viral diseases (Subrahmanyam *et al*., 1980). Rot diseases are mostly fungal disease, which are soil and seed borne. These cause disintegration of fruit and seed tissues and are covered with yellow or green spores. Fungal strains of *Aspergillus flavus* produce highly toxic aflatoxin. About 360 species of arthropod pests attack groundnut before harvest and cause direct damage as well as act as fungal and viral vectors (ICRISAT, 1987).

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SURVEY ON WEB CONTENTS, WEB MINING AND PAGE RANKING

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ABSTRACT

Web mining associate on the knowledge retrieval and the extraction data are analyzed. This web data process is extracted on the available sources (server, web page, cookies).search data is retrieved on the information retrieval. The relevancy to the user need using search rank algorithm information retrieval process is going on the web mining. The web mining serves on the log files on the ASCII text files to be log on the user's the high data usage are intended on the web documents in the Information retrieval. This paper will introduce late research utilizing keywords and information retrieval. Most of the search engines are ranking their search results in response to user's queries to make their search navigation easier and it exploresthe Agent based weighted page ranking algorithms for web content mining to retrieve more relevant information. AWPR algorithm retrieves the most important content information or web pages in front of end users.

Keywords-Data extraction, Web Content Mining, Page Rank, Weighted Page Rank

I.INTRODUCTION

Web mining traverse on the pattern in the web navigation mining path traversal graph are recommended on the web mining[4]. Web traversal mining navigates on the horizontal line. The user navigation pattern in the hyperlinks. The method is navigated on the certain pattern web content mining are categorize under the web query. While there are many benefits to be gained from web mining, A clear drawback is the potential for severe violations of privacy. As online learning method are expanded to the standard level. In late 2006 the education standard and quality assurance are medium level. Now the education standard is increased better. The web mining is created through the web logs. The web usage mining association rules are exceeded some specified threshold. [5] Classification techniques are building under the several e-commerce areas. The culture mining is discovered using web mining concept. The culture plays an important role predicts to be search on web mining.[6] Web mining system is constructing under the organized structure. To avoid problems we analyze the web data to the optimal solution to fulfill these conditions. The data base is stored by the resource to construct web data.

Personalized PageRank is a page rank calculation where random jumps are only allowed to a subset of start nodes. The resources of current process of calculation of Personalized PageRank are highly prohibitive. FAST Personalized PageRank is utilized to find the target nodeset. Using the mentioned target set, the algorithm gives an estimation of the closeness of any pair of nodes in the graph. As the time taken by the estimation of Personalized PageRank is directly proportional to the network size[11].

Research Article

In vitro antifungal activity of *Pterocarpus marsupium* used among tribal communities of Western Ghats, Coimbatore, Tamil Nadu

Rangasamy Dhanabalan[1*], Subbu Balachandar[1], Joseph Devakumar[2]

ABSTRACT

Background: To investigate the *in vitro* antifungal activity of *Pterocarpus marsupium* leaf extracts used in folklore treatments among tribal community in the Western Ghats of Coimbatore district. **Methods:** The crude aqueous and organic solvent leaf extracts extracted by cold maceration method were subjected to antifungal activity against *Aspergillus flavus* and *Aspergillus fumigatus* by agar plate dilution method. **Results:** The methanol and ethanol leaf extracts of *P. marsupium* showed significant ($P < 0.01$) antifungal activity against *A. flavus* at an minimum inhibitory concentration of 31 µg/ml, with IC_{50} values 114.04 and 169 µg/mL, respectively. Similar antifungal activity of 100% inhibition was exhibited by alcoholic leaf extracts against *A. fumigatus*. Besides, the chloroform leaf extracts showed 82.94% and 80.58% fungistatic activity against *A. fumigatus* and *A. flavus*, respectively. Comparable antifungal activity was also observed in other concentrations of alcoholic and chloroform extracts of *P. marsupium* against *A. flavus* and *A. fumigatus*. The aqueous leaf extract did not show demonstrable antifungal activity against the two fungal strains used in the assay which was not up to the score. **Conclusion:** The methanolic and ethanolic leaf extracts of selected plants were more active against tested fungal strains when compared to the chloroform and aqueous extracts. Further investigations are mandatory to identify the antifungal compounds present in the chosen herb.

KEY WORDS: Antifungal, aspergillosis, bronchopulmonary, folklore, mycosis

INTRODUCTION

Dissemination of fungal spores is a major problem in the spread of spore derived allergic pulmonary diseases. In temperate and tropical climates *Aspergilli* are well-recognized causes of allergic bronchopulmonary infections. Aspergillosis has been recorded in India, regularly in tropical areas with the development of fungus ball and pulmonary cavitation in patients, causing severe hemoptysis secondary to tuberculosis.[1] A type of aspergillosis called Farmer's Lung infection is a housing of mold spores in pulmonary cavities among paddy field agrarians involved in farming practices. Farmworkers in Narasipuram, Semmedu, and areas near Velliangiri foothills (Poondi) of the Western Ghats, Coimbatore, are the chief cultivators of grains and sugarcane.[2] The husk, hay, and other grain debris are the major growth substrates of Aspergillus species, and frequent exposer of these field workers during harvesting of crops is frequently prone to farmer's lung Aspergillosis infection. Treatment of such fungal infections should be considered with utmost consequence due to the emergence of antifungal resistance, if untreated which may be chronic leading to morbidity and sometimes fatal among the community.

As fungal infections with multidrug resistance have posed a great problem in tropics and the availability of antifungal is lesser compared to antibacterial agents, a search of alternative antifungal agents is a mandate with null side effects. Phototherapy is an arena practiced among the folklore traditional healers for various diseases and disorders. From time immemorial, traditionally phytotherapy information has been conceded as oral communication from generation to generation. Among secondary metabolites from herbal sources plant polyphenolics, essential oils, terpenoids, saponins, alkaloids, peptides, and proteins were evidenced to be natural antifungal compounds

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Research Article

BIOPROSPECTING OF MARINE SPONGE (*CALLYSPONGIA DIFFUSA*) FOR ANTIBACTERIAL COMPOUND

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ABSTRACT

Objective: Marine sponges are a rich source of new antimicrobial drugs. The present study was aimed to evaluate the antibacterial activity of the marine sponge (*Callyspongia diffusa*) against human pathogenic bacteria and to analyze the presence of bioactive compounds in the sponge.

Methods: Antibacterial activity of the marine sponge *C. diffusa* was examined using petroleum ether, chloroform, n-butanol, methanol, ethanol, and water as solvents and tested against human pathogenic bacteria such as *Escherichia coli*, *Pseudomonas aeruginosa*, and *Staphylococcus aureus* by agar well diffusion method. Zoochemical analysis was performed to screen for the presence of secondary metabolites. Bioactive compounds were purified by thin layer chromatography (TLC) and were identified by gas chromatography-mass spectrometry (GC-MS) analysis.

Results: The results obtained show that the sponge extracts had significant antibacterial activity against the tested strains. The methanol extract was found to be the most effective and exhibited the highest potency against all pathogens tested. Zoochemical analysis revealed the presence of alkaloids, terpenoids, and sterols. In TLC, spots corresponding to a Rf value of 0.67 were found to possess antibacterial activity against the test bacteria. GC-MS chromatogram showed seven major peaks at retention time of 12.69, 13.81, 24.21, 24.65, 28.01, 28.93, 30.87 minutes. The mass of the compounds and fragments were matched with the National Institute of Standard and Technology (NIST) database for identification of probable compounds present in the sample. GC-MS analysis revealed the presence of bioactive compounds in the sponge.

Conclusion: This study confirms the marine natural species provides an excellent source of bioactive metabolites that can exploit to develop novel and potential therapeutic agents.

Keywords: *Callyspongia diffusa*, Solvent extraction, Antibacterial activity, Thin layer chromatography, Gas chromatography-mass spectrometry.

INTRODUCTION

Sponges belong to the phylum *Porifera*, and they are ancient metazoans that have existed since 700-800 million years. They are abundantly present not only in the tropical oceans but also occur in temperate waters and even in fresh water [1]. They are simple multicellular invertebrates, and they are attached to solid substrates in benthic habitats [2]. The sponges are of three classes, namely, the Calcarea (5 orders and 24 families), Demospongiae (15 orders and 92 families), and Hexactinellida (6 orders and 20 families). About 15,000 species of sponges have been described so far [3].

Marine sponges are rich sources of pharmacological compounds [4]. Studies show that secondary metabolites of sponges play an important role in their survival in the marine water [5,6]. These secondary metabolites have interesting biomedical, pharmaceutical, and biotechnological applications [7]. These bioactive compounds are attributed to their antimicrobial, antiviral, antitumor, and

MATERIALS AND METHODS

Collection of marine sponge

The sponge was collected from the Krusadai Island, Gulf of Mannar, Ramanathapuram District, Tamil Nadu, India. It is 3 km from Pamban and 500 m from Kandugal point (Lat 9°15'00" N, Long 79°13'25"E). Sponges were collected by scuba diving at a depth of 5-10 m. A part of the specimen has been deposited in the Microbiology Research laboratory of Dr. N. G. P. Arts and Science College for records.

Identification of sponge

The sponge was identified as *Callyspongia diffusa* by Dr. R. Saravanan, Scientist, Central Marine Fisheries Research Institute, Mandapam Coast based on the skeletal characteristics (size and shape of the spicules), and external morphology. The color of its exterior was yellowish to purplish. Its body has small protrusions, cavities, and branches.

- Kingdom: Animalia
- Phylum: *Porifera*

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Extracting Textual Information from Google Using Wrapper Class

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Abstract: In general, the web text documents are often structured, un-structured, or semi-structured format that is promptly growing everyday with massive amounts of data. The users provided with many tools for searching relevant information. Some of the searches include, Keyword searching, topic and subject browsing can help users to find relevant information quickly. In addition, Index search mechanisms allow the user to retrieve a set of relevant documents. Occasionally these search mechanisms are not sufficient. With the rapid development of Internet, amount of data available on the web regularly increased, which makes it difficult for humans to distinguish relevant information. A wrapper class is proposed to extract the relevant text information and focus on finding useful facts of knowledge from unstructured web documents using Google. Techniques from information retrieval (IR), information extraction (IE), and pattern recognition are explored.

Keywords: Information Extraction, Retrieval, Semantic Web, Web Search Engine

30. A Study on Customer's Awareness on Green Banking Initiatives in Selected Private Sector Banks with Special reference to Coimbatore City

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STRACT:

Green banking means promoting environment-friendly practices and reducing your carbon footprint from your banking activities. There has not been much initiative in this regard by the banks and other financial institutions in India though they play an active role in India's emerging economy, so it is suggested to initiate to promote green banking in India. The concept of green banking helps to create a cleaner and greener future as Green Banking has a direct impact on the environment. This paper has been made to study the level of consumer satisfaction and awareness regarding "Green banking services "initiative taken by various Private sector banks in India, Coimbatore. The study aims to identify the opinion and awareness of bank employees and customers as regards to green banking concept in private sector banks. It is necessary to identify various initiatives taken by the bank on the concept of green banking in order influence stomer and make them user friendly.

Key words: Green Banking, Environment, Customer satisfaction

INTERNATIONAL CONFERENCE ON "EMERGING TRENDS AND INNOVATIVE STRATEGIES IN SOCIAL MEDIA MARKETING – ISSUES AND CHALLENGES"

19

CONSUMERS BUYING BEHAVIOUR TOWARDS ORGANIC FOODS IN COIMBATORE REGION

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ABSTRACT

An awareness and demand of organic products are increasing in India. Organic foods are unprocessed food without artificial ingredients, preservatives or irradiation. The aim of this research paper is to know about the consumer attitude and buying behaviour towards organic food products. The consumer intense to purchase organic food is influenced by various factors such as purchase intention, acceptability, affordability, health consciousness, awareness and attitude. In this study 125 consumers are used in the survey for finding the buying behaviour of organic foods in Vellore city during the year 2017. Data is collected from various organic shops in coimbatore city.

Keywords: Organic Food Products, Consumers, Purchase, Attitude, Buying.

1. INTRODUCTION

Magnusson et al. (2003) found from research is human health, environmental friendly are predictors of purchase frequency. Torjusen et al. (2001) survey is organic food purchasers were more concerned with environmental, health issues. Magnusson et al. (2001) survey was conducted through mail , most respondents positive attitudes towards organic food products are good taste and more expensive, healthier than conventional products. Loureiro et al. (2001) survey is higher food safety, environmental concerns are increase the consumers' willingness to purchase the organic products. Tregear et al. (1994) survey is conducted through mail and telephone. Healthy, environmental friendly and better tasting than conventional food products. Jolly (1991)mail survey was conducted that found their research is food safety, freshness, health benefits, nutritional value, environmental effect, flavour and appearance of product are the factors considered choosing organic foods. Ragavan&Mageh (2013) found their research is that consumer perception towards organic products, product safety, environment friendliness and availability of product information are the major factors for purchase intention towards organic products. Zeinabseyedsaleki et.al (2012) found their study is that consumers buying behaviour is influenced by organic knowledge, quality, price consciousness, subjective norms and familiarity on attitude. 150 consumers are responded in Iran. The survey is conducted through questionnaire with simple random method. All the factors are positive and significant except the subjective norms influence on organic buying behaviours. Ihsan effendi et.al (2015) the aim of the research is that taken from 270 respondents at several organic markets. Organic food knowledge, health knowledge and subjective norm variables are affected the consumer behaviour. Shashikiran & Madhavaiah (2014) found their research is conducted in Bangalore city from 150 consumers. 53% of the consumers were aware about organic products in the market. The study is focused on willingness to pay premium for organic food products. Consumers are ready to pay 20 – 30 % more for organic food products for belief on the safety and health aspect of the product. Zhou Lili& Chen Tong (2007) found their research is to gain knowledge and consumer attitudes towards organic food in Urumqi. The data was collected from 720 consumers by face – to – face survey. 44.9% of consumers had never heard of organic food. Consumers mostly considered the organic products are healthy, good quality and taste. Most of them are not very familiar with the supply of organic food products.So marketers to increase the awareness, advertise and knowledge of products. Some groups willing to pay higher prices for these food. So some marketing strategies should be targeted towards such groups. D. Anand& V.S. Palaniammal 37 Int. Res. J. Mgmt. Soc. Sci. Vol. 1(4), MarijaRadman (2005) the aim of the research is to gain knowledge about consumer attitudes toward organic products in Croatia. The data is collected by face – to –face from 179 consumers. Consumers are not familiar with the supply of products. Some consumers have more positive attitudes towards organic products. Marketing strategies for organic products should be targeted towards such groups. Sakthirama&Venkatram

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The Major Factors Influencing Parents Buying Behaviour of Children Products

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ABSTRACT

Advertisers spend significant amounts of money developing advertising campaigns that they hope will be favourably received by their target audiences and will increase awareness, reinforce brand and/or company images, and lead to sales. Children influence their parents' buying behaviour and decision making, they represent the future adult consumers. Research has shown that children hold a certain power as consumers, and their influence on family purchases goes beyond the selection of toys and cereals. Parents have shown strong perception that have significant effect due to the impact of media advertisement as a major source inspiration about the children products and brands which may almost valuable source of information to their children that have directly influenced their children decision making. Therefore, this study is an attempt to examine the Advertisement impact on Parents buying behaviour of children products in Coimbatore City. It becomes important to understand whether the product information, pleasure motives, celebrity impact and likeability have positively influenced the parents to buy products for their children? The objectives are to study the demographic variables of the parent consumers and to analyze the advertisement impact on parents buying behaviour of children products. Primary and Secondary data was used for data collection. The sampling technique selected for the study is convenience sampling method. The collected data was analyzed with the help of statistical tools such as Simple Percentage Method, Weighted Average, Correlation and Regression Analysis. It is observed that the R-square value shows 49.9% variance in buying behaviour of parents explained by the impact of advertisement on buying behaviour based on Product Information, Likeability, Pleasure Motives, Celebrity Endorsement and Attitude. Finally, it is concluded that the explanatory variables in the order of highest to the lowest impact of advertisement significantly influenced the parents buying behaviour children products are namely: Attitude, Celebrity Endorsement and Product Information to reject the null hypothesis. Whereas, the other two variables; Likeability and Pleasure Motives though were found positive have not significantly contributed to influence the parents buying behaviour of children products. It is concluded that though advertisements are amusing and entertaining, some of the parents were not convinced with the information provided or influenced by the celebrity endorsement which can be

MoU's

S. No.	MoU Details	Activity on MoU	Supportive Documents Link
1	Voice Training Solution, 80, DPF Street, P.N.Palayam, Coimbatore - 37.	English Language Techniques (ELT)	
2	Alpha Labs & Technologies Opposite to Avila Convent, Venkitapuram, Coimbatore - 641 025.	Diploma Programme in Food Safety and Quality Control	
3	National programme On Technology Enhanced Learning (NPTEL), IIT Madras.	SWAYAM NPTEL Local chapter - Online Course	
4	Virtual Labs Nodal Centre Programme, Amrita Vishwa Vidyapeetham, Coimbatore.	Value Virtual labs & Training	
5	Phoenix IT Consulting 31/32, Anjugam 2nd Street, Opposite to kasi Theatre, Jafferkbanpet, Chennai - 83	Qlik View & Big data analytics