



SOKA IKEDA COLLEGE OF ARTS AND SCIENCE FOR WOMEN
(Affiliated to the University of Madras)
Chennai 600 099, Tamilnadu.

3.3.1. Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years

2019

S.No.	Title of the Paper	Name of Author/s	Department of the Teacher	Name of Journal	Calendar year of Publication	ISSN Number
1	Effects of Zerovalent Iron and Iron Oxide Nanoparticles on White Leg Shrimp, <i>Litopenaeus vannamei</i> (Boone): A Comparative Study of Toxicity, Bioaccumulation and Oxidative Stress	Dr. C. Latha	Biochemistry	International Journal of Pharmacy and Biological Sciences	2019	P - ISSN: 2321-3272 E - ISSN: 2230-7605
2	Overview of Multimedia File Formats & Survey of Multimedia based Data Mining	M. Mahaboob Meera	Computer science	International journal of Advanced Studies of Scientific Research	2019	ISSN: 2460-4010
3	Security Threats in Cloud Computing	Mrs.J. Vimal rosy	Computer science	Asian Journal of Computer Science & Technology	2019	P - ISSN: 2249-0701 E - ISSN: 2583-7907
4	Effect of ethanolic seed extract of <i>Caesalpinia bonducella</i> on Mifepristone induced PCOS rats	Mrs. B. Meera Murugesan	Biochemistry	Biomedicine	2019	ISSN: 0970 2067




PRINCIPAL
SOKA IKEDA COLLEGE OF ARTS
AND SCIENCE FOR WOMEN
CHENNAI - 600 099



SOKA IKEDA COLLEGE OF ARTS AND SCIENCE FOR WOMEN
(Affiliated to the University of Madras)
Chennai 600 099, Tamilnadu.

3.3.1. Number of research papers published per teacher in the Journals as notified on UGC CARE list during the last five years

2019

S.No.	Title of the Paper	Name of Author/s	Department of the Teacher	Name of Journal	Calendar year of Publication	ISSN Number
5	Indo-Saracenic Architecture	Mrs. S. Sundari	TTM	Pramana Research Journal	2019	ISSN: 2249-2976
6	A Study of Issues that Affect Agricultural Mechanization in Thiruchirapali District	Mrs. B.Deepa	Economics	Think India Journal	2019	ISSN: 0971-1260
7	Xanthine Oxidase Inhibitory Activity of the Hydro-Ethanollic Extracts of selected Indian Medicinal Plants	Mrs. B. Meera	Biochemistry	Journal of Xi'an, University of Architecture & Technology	2019	ISSN 1006-7930
8	The Theme of Hunger and Degradation in Kamala Markandaya's Nectar in a Sieve	Mrs. S.B. Suganthi	English	Adalya Journal	2019	ISSN: 1301-2746




PRINCIPAL
SOKA IKEDA COLLEGE OF ARTS
AND SCIENCE FOR WOMEN
CHENNAI - 600 099



SOKA IKEDA COLLEGE OF ARTS AND SCIENCE FOR WOMEN
(Affiliated to the University of Madras)
Chennai 600 099, Tamilnadu.



International Journal of Pharmacy and Biological Sciences-IJPBS™ (2019) 9 (2): 71-79

Online ISSN: 2230-7605, Print ISSN: 2321-3272

Research Article | Biological Sciences | Open Access | MCI Approved

UGC Approved Journal

Effects of Zerovalent Iron and Iron Oxide Nanoparticles on White Leg Shrimp, *Litopenaeus vannamei* (Boone): A Comparative Study of Toxicity, Bioaccumulation and Oxidative Stress.

P S Shiva Prasad¹, Deepak Kumar¹, Latha Chandrakas², M Nidhin³ and V Krishnakumar^{1,*}

¹Department of Life Sciences, CHRIST (Deemed to be University), Hosur Road, Bengaluru- 560029, Karnataka India.

²Department of Biochemistry, Soka Ikeda college of Arts and Science for Women's College. Sethu Bhaskara Nagar, Madhanangkuppam, Chennai- 600099, India.

³Department of Chemistry, CHRIST (Deemed to be University), Hosur Road, Bengaluru-560 029, Karnataka, India.

Received: 11 Jan 2019 / Accepted: 12 Mar 2019 / Published online: 1 Apr 2019

Corresponding Author Email: krishnakumar.v@christuniversity.in

Abstract

The present study was performed to compare the effect of green synthesized zerovalent iron (nZVI) and iron oxide (nIO) nanoparticles on mortality rate, bioaccumulation and oxidative stress biomarkers in *Litopenaeus vannamei*, *in vitro*. The investigation on toxicity assessment revealed that the nZVI cause high mortality even at low concentration compared to nIO. The results on oxidative stress biomarker enzymes and bioaccumulation demonstrated statistically significant variations, between the nanoparticles, with the increase of concentration and exposure time.

Keywords

Zerovalent iron oxide, iron oxide, toxicity, *L. vannamei*.




PRINCIPAL
SOKA IKEDA COLLEGE OF ARTS
AND SCIENCE FOR WOMEN
CHENNAI - 600 099

Overview of Multimedia File Formats & Survey of Multimedia based Data Mining

Mahboob Meera.M, Research Scholar, Vels University

Assistant Professor, Soka Ikeda College, Chennai-600 099

Dr.A.Akila, Assistant Professor, Vels University

Assistant Professor, Vels Institute of Science, Chennai

Abstract: Data Mining has been applied to good-structured data. Extracting useful information from large data sets related to multimedia terms by applying data mining methods. Mining in multimedia environment is called multimedia data mining. This literature review paper summarizes the research on multimedia data mining. With the effects of multimedia data methods – text, graphics, images, audio, animation and video, many researchers have felt the necessity of data mining methods. This paper provides an overview of data mining efforts aimed at multimedia data. Identified examples of pattern discovery models addressed by different researchers. The main focus of this paper is to elucidate knowledge by collecting multimedia data set for Multimedia Information Retrieval.

Keywords: Data Mining, Multimedia Data Mining (MDM), Dataset, Multimedia Information Retrieval.

1. Introduction

The interest in Multimedia Data Mining is increasing exponentially. The Hadoop Distributed File System is designed to store large data sets reliably, and to stream those data sets at high bandwidth that suits user applications such as Multimedia Information Retrieval.

Slowly but steadily, Multimedia field is penetrating various sectors e.g., governments, e-commerce, health, retail, insurance, etc. This penetration is supported by the overwhelming amount of data available from different

Knowledge discovery in data bases (KDD), plays a vital role in data mining. The algorithms C4.5, k-means, SVM (support vector machine), Apriori, EM (Expectation Maximization), PageRank, AdaBoost, kNN (k-nearest neighbours), Naïve Bayes, and CART are the top ten data mining algorithms. They cover classifications, clustering, regression, association analysis, and network analysis. The analysis will go with six different stages in database. Furthermore we will apply data mining techniques for classification of multimedia dataset. A total number of 200 data set from different multimedia field has been collected. We have to classify with the help existing data mining methods. The analysis will undergo with six different stages in Multimedia Information Retrieval. Those steps are: Text, Images, Audio, Video, Animation and Graphics. However, more focus will be put in analyzing the data, subject of research, in terms of the technique uses tools, applications, opportunities, challenges, etc. Furthermore, we will apply text mining techniques on the corpus of papers and derive what is common as from the writing (text) perspective. Finally, we will predict future Multimedia (MM) trends.

2. Survey

The data format for the Text, Images, Audio, Animation, Graphics, Video is listed out in the following section.

2.1. Text Files




PRINCIPAL
SOKA IKEDA COLLEGE OF ARTS
AND SCIENCE FOR WOMEN
CHENNAI - 600 099

Security Threats in Cloud Computing

J. VimalRosy¹ and S. Britto Ramesh Kumar²

¹Head, Department of Computer Science, Soka Ikeda College of Arts and Science for Women, Tamil Nadu, India

²Assistant Professor, Department of Computer Science, St. Joseph's College, Tamil Nadu, India

E-Mail: robi_rosij@rediffmail.com, brittork@gmail.com

Abstract - Day by day witnesses a wide development of information technology in the use of cloud computing, and its services shape its architecture. It is indeed, that replaces the former attempts to enrich the security strategy in cloud computing. Security is one of the major issues in the cloud computing environment. In this paper we investigate about security threats and possible solution for cloud. The paper is categorized as follows: Section I describes the cloud computing overview. Section II describes the security threats and challenges in cloud computing. Section III describes the Obstacles and vulnerabilities that can be carried out to cloud environments. Section IV describes the possible solution of the issues. Section V concludes the paper with a cloud computing security.

Keywords: Cloud Computing, Cloud Security

I. INTRODUCTION

Cloud computing is an umbrella term used to refer to Internet based development and services. The cloud is a metaphor for the Internet. A number of characteristics define cloud data, applications services and infrastructure:

1. Remotely hosted: Services or data are hosted on someone else's infrastructure.
2. Ubiquitous: Services or data are available from anywhere.

Cloud computing uses three service model: software as a service (SaaS), platform as a service (PaaS) and infrastructure as a service (IaaS).

A. Software as a Service (SaaS)

SaaS is a model of software deployment where an application is hosted as a service provided to customers across the Internet. SaaS is generally used to refer to business software rather than consumer software, which falls under Web 2.0.

By removing the need to install and run an application on a user's own computer it is seen as a way for businesses to get

Examples: Google docs, Microsoft office 365, p rezi.com

B. Platform as a Service (PaaS)

Your computing platforms, such as operating system, programming language execution environment, database, web server etc., are all based in the Cloud. PaaS has several advantages for developers.

1. Operating system features can be changed and upgraded frequently
2. Teams can work together on software development regardless of distance
3. Services can be obtained from diverse sources that cross international boundaries.
4. Initial and ongoing costs can be reduced by using a single vendor
5. Multiple projects can use the same developers

Examples: AWS Elastic beanstalk, Salesforce.com Google App Engine IBM.

C. Infrastructure as a Service (IaaS)

Infrastructure as a Service (IaaS) Infrastructure as a Service is a single tenant cloud layer where the Cloud computing vendor's dedicated resources are only shared with contracted clients at a pay-per-use fee. This greatly minimizes the need for huge initial investment in computing hardware such as servers, networking devices and processing power. They also allow varying degrees of financial and functional flexibility not found in internal data centers or with collocation services, because computing resources can be added or released much more quickly and cost-effectively than in an internal data center or with a collocation service. IaaS and other associated services have enabled startups and other businesses focus on their core competencies without worrying much about the provisioning and management of infrastructure. IaaS completely abstracted the hardware




PRINCIPAL
SOKA IKEDA COLLEGE OF ARTS
AND SCIENCE FOR WOMEN
CHENNAI - 600 099

Effect of ethanolic seed extract of *Caesalpinia bonducella* on Mifepristone induced PCOS rats

Balasubramanian Meera^{1,2}, Palayyan Muralidharan³ and Rajeswary Hari¹

¹Department of Biotechnology, Dr. MGR Educational and Research Institute, Maduravoyal, Chennai, India.

²Department of Biochemistry, Soka Ikeda College of Arts and Science, Madhanangkuppam, Chennai, India

³Department of Pharmacology and Toxicology, C. L. Baid Metha college of Pharmacy, Thoraipakkam, Chennai, India

(Received: April 2019 Revised: May 2019 Accepted: June 2019)

Corresponding author: **Rajeswary Hari**. E-mail: rajihar@gmail.com

ABSTRACT

Introduction and Aim: PCOS is a complicated endocrinopathy of women in reproductive age with unknown etiology causing ovulatory dysfunction and metabolic disturbances. The present study investigated the effects of ethanolic seed extract of *Caesalpinia bonducella* (ESECB) in a mifepristone model of polycystic ovarian syndrome, which has the same clinical and metabolic features as in PCOS women.

Materials and Methods: A daily administration of mifepristone (4mg/kg b.w.) to female rats for 8 days induces PCOS by indicating persistent estrous cycle. PCOS induced rats were treated with ESECB 200mg and 400mg/kg b. w. *per oral* for 28 days and at the end, the weight of the body and reproductive organs were determined. Biochemical parameters were also estimated. Metformin was used as a standard drug.

Results: A significant increase ($p < 0.01$) in the weight of the body and reproductive organs as well as hyperglycemia and dyslipidemia were observed in the PCOS induced animals, which were reduced considerably in the ESECB drug treated animals. Among two concentrations the animals which received 400mg/kg b. w. of ESECB drug showed significant effect when comparable to the animals which received 200mg/kg b. w. of ESECB.

Conclusion: Based on these observations the ethanolic seed extract of *Caesalpinia bonducella* (ESECB) can be used as a potential drug in the management of PCOS.

Keywords: *Caesalpinia bonducella*; ESECB; PCOS; Mifepristone.




PRINCIPAL
SOKA IKEDA COLLEGE OF ARTS
AND SCIENCE FOR WOMEN
CHENNAI - 600 099

INDO-SARACENIC ARCHITECTURE

S.Sundari

Assistant Professor

Department of Tourism and Travel Mangement

sundari605@gmail.com

Abstract

This project deals with the complete information, about Indo-Saracenic Architecture in India. Various information about the architectural styles, elements used for construction and its other tourism potential are elaborately discussed in this project. The project also gives information about the historical data of Indo-Saracenic Monuments. All the necessary details for a tourist who would like to visit Indo-Saracenic monuments are clearly described. The rich cultural heritage is explained to enable or to understand more about the country's importance.

Keywords: *Indo saracenic architecture, dome, arches, minarets.*

Islamic Style

Islamic style performs a dominant role in Indo-Saracenic architecture in India. In the Islamic style magnificent gates, forts, mausoleums, mosques, palaces, public buildings and tombs etc were built. The architecture created under the Mughals (Islamic rulers) was a common heritage of both the Hindus and the Muslims. A common characteristic of the Mughal buildings is the domes, the slender turrets at the corners, the palace halls supported on pillars and the gateways which is also one of the principle characteristics found in the Indo-Saracenic buildings. The Mughal buildings are richly decorated with costly articles. These buildings were constructed mostly with red sand stone and white marble. The Mughal period in the Indian history is one of the glorious periods that have enriched the country. Some of the main characteristics of Mughal style found in Indo- Saracenic architecture are:-



PRINCIPAL
SOKA IKEDA COLLEGE OF ARTS
AND SCIENCE FOR WOMEN
CHENNAI - 600 099

A Study of Issues that Affect Agricultural Mechanization in Tiruchirappalli District

B. Deepa¹, Dr. V. S. Murali²

¹Assistant Professor, Department of Economics,
Soka Ikeda College, Madanakuppam, Chennai - 600 099

²Associate Professor, Department of Economics,
A.M. Jain College, Meenambakkam, Chennai - 600 114

ABSTRACT

The study was conducted in Tiruchirappalli, a district that covers a significant part of the areas in Tamil Nadu that favours paddy cultivation. The core aim of the study revolves around identifying the farmers' problems regarding mechanization and suggesting appropriate remedies. Three areas, namely (Manikandam), (Musiri) and (Andanallur) divisions, have been selected for this study on the grounds of the highest region under new agricultural implementation. The sample divisions were then divided into three classes, heavily mechanized (HMF), moderately mechanized (MMF) and under mechanized farms (UMF). The agricultural mechanization process faces the twin problems (i) The investment capital constraints on the required scale for two reasons of economic viability and insufficient credit support (ii) Its negative impact on the already under-employed workforce. Mechanization however encourages intensive farming, cost-effectiveness in crop production and thereby increases farm income and economic efficiency. As per the findings of this study, the key issues in agricultural mechanization, as stated by farmers were found to include the lack of availability of post-sale machine based services & accessories, shortage and inconsistency in fuel supply, high cost of spare parts, difficulties in processing and obtaining institutional credit and their high costs. Although the study covered only some areas of the district Tiruchirappalli, generalization is not difficult for other areas in the district. But recognizing regional differences in farming conditions has to be done with due care.

Keywords : Heavily Mechanized Farms (HMF), Moderately Mechanized Farms (MMF), Under Mechanized farms (UMF), Economic viability and Insufficient credit support.

1. INTRODUCTION

Agriculture has a great significance as it can affect significantly towards the socio-economic status improvement of a major segment of the weaker community. Unless agricultural technology designed for farmers in developing countries are not translated correctly (appropriately) and implemented accordingly, all the attempts made would have been in vain by the scientists who developed new technologies. This enormous ability is constrained by conventional and tenure structures and subsistence farming practices (new technologies), which sadly seldom maintain or produce sufficient returns that can facilitate the creation of more economically targeted systems for livestock production. The degree of mechanization is measured by the need for it and the ability to make investments on a significant scale is more critical. The scale of farms also renders mechanization uneconomical for the majority of Indian farmers who are marginal or small. For them even small investments needs credit. The absence, or inadequacy of credit constraints the process of mechanization. The problems faced by the farmers are significant enough to affect the extent to which they use mechanization in their




PRINCIPAL
SOKA IKEDA COLLEGE OF ARTS
AND SCIENCE FOR WOMEN
CHENNAI - 600 099

XANTHINE OXIDASE INHIBITORY ACTIVITY OF THE HYDRO-ETHANOLIC EXTRACTS OF SELECTED INDIAN MEDICINAL PLANTS

B.Meera ^{1,2}, Rajeswary Hari², P.K. Siva¹

¹Department of Biotechnology, Dr.MGR Educational & Research Institute, Maduravoyal,
Chennai, India.

²Department of Biochemistry, Soka Ikeda College of Arts and Science, Madhanangkuppam,
Chennai, India.

³PG and Research Department of Botany, J.J.College of Arts and Science, Pudukkottai, Tamil Nadu - 622
422.

Abstract

Introduction : The search for novel xanthine oxidase (XO) inhibitors using an optimized protocol we have screened the Hydro - Ethanolic extracts of 15 medicinal plants belonging 10 families, regardless of their claimed ethanopharmacological and /or food uses . **Methods :** The Super oxide, Nitric oxide, hydrogen peroxide radical scavenging activity and Total antioxidant activity of these extracts were investigated employing various established *in vitro* systems. Total phenolic and flavanoid content were also determined. **Results :** The Xanthine oxidase enzyme inhibitory and the antioxidant activity of Hydro -Ethanolic plant extract were found to be in the following order, *Trigonella foenum* > *Nigella sativa* > *Piper longum* > *Brassica juncea* > *Piper nigrum* > *Cuminum cyminum* > *Cinnamomum zeylanicum* > *Zingiber officinale* > *Foeniculum vulgare* > *Cinnamomum tamala* > *Coriandrum sativum* > *Murraya koenigii* > *Syzygium aromaticum* > *Elettaria cardamomum* > *Prunus amygdalus*. Among them the extracts such as *Trigonella foenum* , *Nigella sativa* , *Piper longum*, *Brassica juncea* , *Piper nigrum* and *Cuminum cyminum* showed above 80% inhibition of Xanthine oxidase. The quantitative estimation of these plant extracts revealed the considerable amount of phenols and flavanoids which may be attributed for its antioxidant activity through the inhibition of Xanthine oxidase enzyme. **Conclusion :** The study showed that many of the tested plant species are potential sources of natural XO inhibitors that can be developed, upon further investigation, into successful herbal drugs for treatment of gout and other XO-related disorders.

KEY WORDS: Free radical scavenging, Total antioxidant, Xanthine oxidase.




PRINCIPAL
SOKA IKEDA COLLEGE OF ARTS
AND SCIENCE FOR WOMEN
CHENNAI - 600 099

**The Theme of Hunger and Degradation in Kamala Markandaya's
*Nectar in a Sieve***

S.B.Suganthi

Assistant Professor of English, Soka Ikea college of Arts and Science for Women, Chennai-
99, Tamil Nadu, India
Email:rajk0377@gmail.com

Abstract

Kamala Markandaya occupies a prominent place among the Indian-English novelists. Her writings concentrate on changes in tradition and Indianness. She has discussed themes on Poverty, hunger, starvation, cultural issues, and East-West encounter. Her novels make an experimental journey undertaken in search of a solution that can suggest a way out of the dilemma. The picture of rural India juxtaposed with the glamorous westernized life of England finds a prominent place in her novels. She has first-hand knowledge of rural life, she lived in a South Indian village and observed the life of villagers. After her marriage, she settled in England as an expatriate. This experience enabled her to acquire knowledge of the British policy of colonialism and imperialism. The present paper attempts to analyze how Kamala Markandaya's *Nectar in a Sieve* focusses on the theme of hunger and degradation and how it reflects through her major characters. It also traces how Markandaya depicts the life of toil and uncertainty lived by the tenant-farmers. When their harvest fails to owe to natural calamities, the farmers face not only starvation but also miserable poverty that forces them to sell even their small possessions in order to pay the rent. In this novel, the protagonist Rukmani and her husband, Nathan are forcibly dispossessed of their land as a result of rapid industrialization.

Keywords: Hunger, degradation, indianness, rural, colonialism, industrialization.




PRINCIPAL
SOKA IKEDA COLLEGE OF ARTS
AND SCIENCE FOR WOMEN
CHENNAI - 600 099