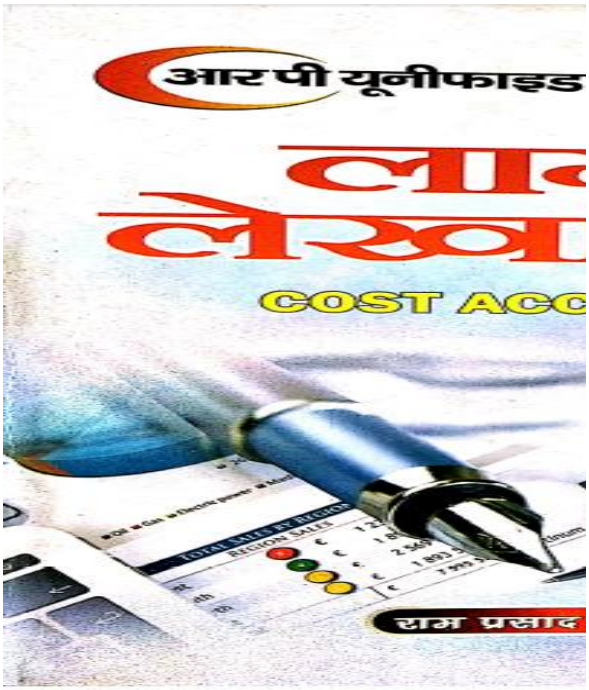
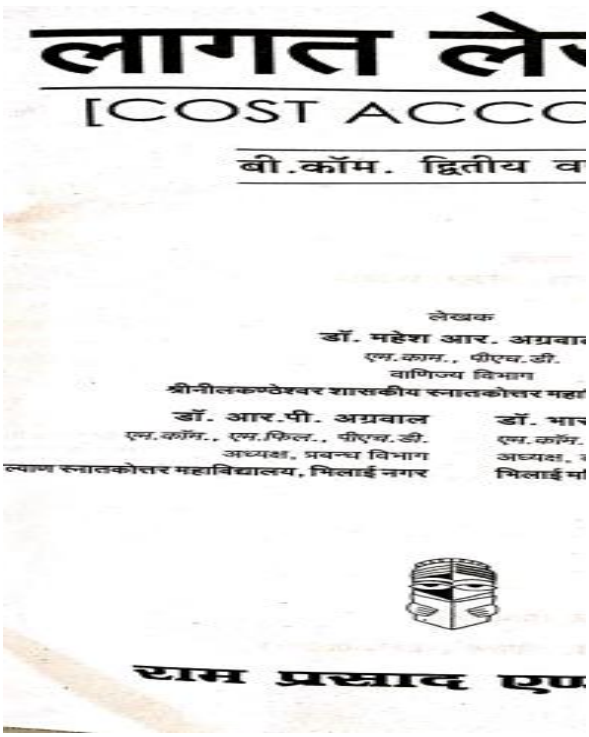
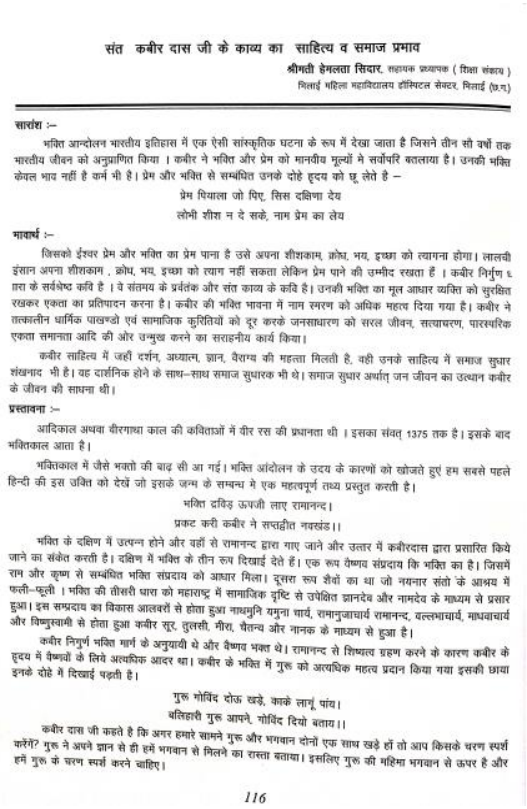
3.2.2 Number of books and chapters in edited volumes/books published andpapers in national/ international conference-proceedings per teacher

COMMERCE

Academic Year 2017-18







संत कबीर दास जी के काव्य का साहित्य व समाज प्रभाव

श्रीमती हेमलता सिदार, सहायक प्राध्यापक (शिक्षा संकाय)
भिलाई महिला महाविद्यालय टॉमिंटल सेक्टर, भिलाई (छ.ग.)

सारांश :–

भक्ति आन्दोलन भारतीय इतिहास में एक ऐसी सांस्कृतिक घटना के रूप में देखा जाता है जिसने तीन सौ वर्षों तक भारतीय जीवन को अनुप्राणित किया । कबीर ने भक्ति और प्रेम को मानवीय मूल्यों मे सर्वोपरि बतलाया है। उनकी भक्ति केवल भाव नहीं है वर्न भी है। प्रेम और भक्ति से सम्बंधित उनके दोहे हृदय को छू लेते है –

प्रेम पियाला जो पिए, सिस दक्षिणा देय
लोभी शीश न दे सके, नाम प्रेम का लेय

भावार्थ :–

जिसको ईश्वर प्रेम और भक्ति का प्रेम पाना है उसे अपना शीशकाम, क्रोध, भय, इच्छा को त्यागना होगा। लालची इंसान अपना शीशकाम , क्रोध, भय, इच्छा को त्याग नहीं सकता लेकिन प्रेम पाने की उम्मीद रखता हैं । कबीर निर्गुण ब्रह्म के सर्वश्रेष्ठ कवि है । वे संतमय के प्रवर्तक और संत काव्य के कवि है। उनकी भक्ति का मूल आधार व्यक्ति को सुरक्षित रखकर एकता का प्रतिपादन करना है। कबीर की भक्ति भावना में नाम स्मरण को अधिक महत्व दिया गया है। कबीर ने तत्कालीन धार्मिक पाखण्डो एवं सामाजिक कुरितियों को दूर करके जनसाधारण को सरल जीवन, सत्याचरण, पारस्परिक एकता समानता आदि की ओर उन्मुख करने का सराहनीय कार्य किया।

कबीर साहित्य में जहाँ दर्शन, अध्यात्म, ज्ञान, वैराग्य की महत्ता मिलती है, वही उनके साहित्य में समाज सुधार संखनाद भी है। वह दार्शनिक होने के साथ–साथ समाज सुधारक भी थे। समाज सुधार अर्थात् जन जीवन का उत्थान कबीर के जीवन की साधना थी।

प्रस्तावना :–

आदिकाल अथवा वीरगाथा काल की कविताओं में वीर रस की प्रधानता थी । इसका संवत् 1375 तक है। इसके बाद भक्तिकाल आता है।

भक्तिकाल में जैसे भक्तो की बाढ़ सी आ गई। भक्ति आंदोलन के उदय के कारणों को खोजते हुएं हम सबसे पहले हिन्दी की इस उक्ति को देखें जो इसके जन्म के सम्बन्ध मे एक महत्वपूर्ण तथ्य प्रस्तुत करती है।

भक्ति द्रविड़ ऊपजी लाए रामानन्द।
प्रकट करी कबीर ने सप्तद्वीप नवखंड।।

भक्ति के दक्षिण में उत्पन्न होने और वहाँ से रामानन्द द्वारा गाए जाने और उत्तर में कबीरदास द्वारा प्रसारित किये जाने का संकेत करती है। दक्षिण में भक्ति के तीन रुप दिखाई देते हैं। एक रूप वैष्णव संप्रदाय कि भक्ति का है। जिसमें राम और कृष्ण से सम्बंधित भक्ति संप्रदाय को आधार मिला। दूसरा रूप शैवों का था जो नयनार संतो के आश्रय में फली–फूली । भक्ति की तीसरी धारा को महाराष्ट्र में सामाजिक दृष्टि से उपेक्षित ज्ञानदेव और नामदेव के माध्यम से प्रसार हुआ। इस सम्प्रदाय का विकास आलवरों से होता हुआ नाथमुनि यमुना चार्य, रामानुजाचार्य रामानन्द, वल्लभाचार्य, माधवाचार्य और विष्णुस्वामी से होता हुआ कबीर सूर, तुलसी, मीरा, चैतन्य और नानक के माध्यम से हुआ है।

कबीर निगुर्ण भक्ति मार्ग के अनुयायी थे और वैष्णव भक्त थे। रामानन्द से शिष्यत्व ग्रहण करने के कारण कबीर के हृदय में वैष्णवों के लिये अत्यधिक आदर था। कबीर के भक्ति में गुरू को अत्यधिक महत्व प्रदान किया गया इसकी छाया इनके दोहे में दिखाई पड़ती है।

गुरू गोविंद दोऊ खड़े, काके लागूं पांव।
बलिहारी गुरू आपने, गोविंद दियो बताय।।

कबीर दास जी कहते है कि अगर हमारे सामने गुरू और भगवान दोनों एक साथ खड़े हों तो आप किसके चरण स्पर्श करेंगे? गुरू ने अपने ज्ञान से ही हमें भगवान से मिलने का रास्ता बताया। इसलिए गुरू की महिमा भगवान से ऊपर है और हमें गुरू के चरण स्पर्श करने चाहिए।

प्रकाशक

राम प्रसाद एण्ड संस

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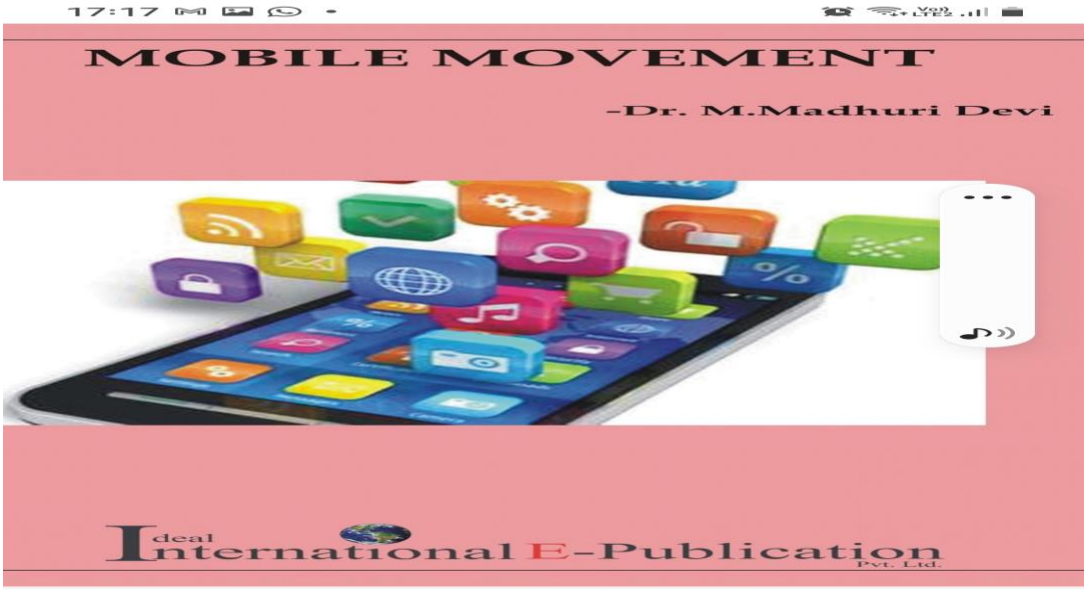

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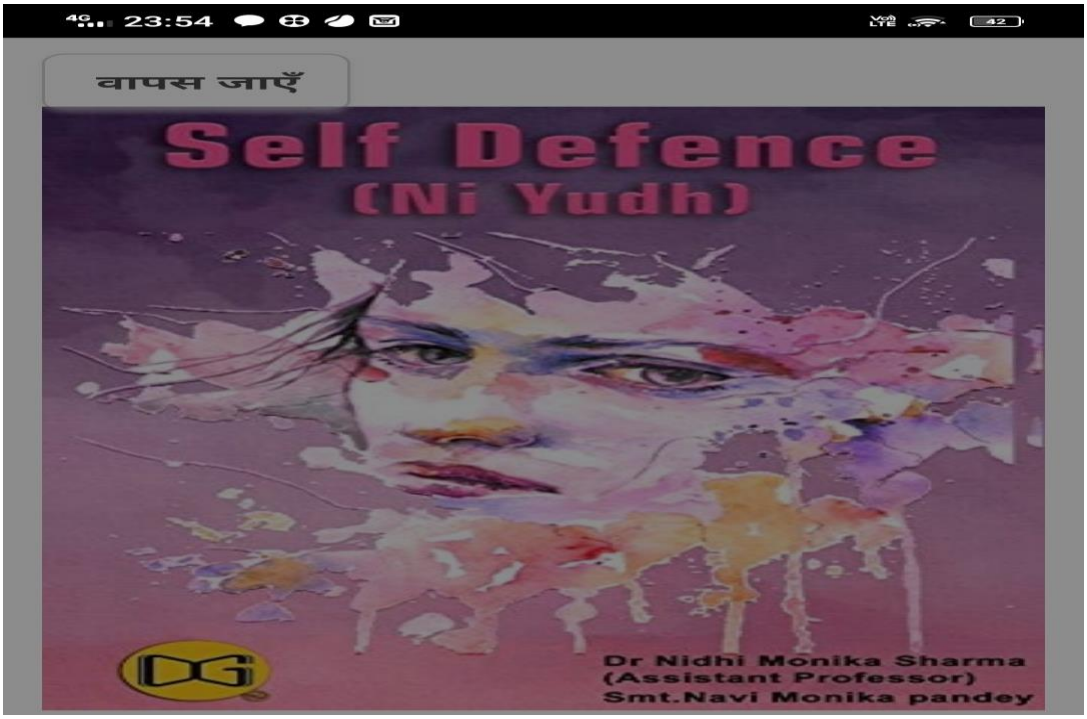

Book details

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English	Onlinegatha	1 January 2020	2

Description

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Conference Papers:

Academic Year 2019-20

Papers **published** in Inter International conference proceedings- 05

- Dr. M. Madhuri Devi

17. Commerce, Law and Management

ISCA-ISC-2019-17CLM-01-Presidential Address

Impact of internet on students in Bhilai, CG, India

M. Madhuri Devi
Department of Commerce, Bhilai Mahila Mahavidyalaya, Bhilai, Durg, Chhattisgarh, India
madhurikiran@gmail.com

Abstract: Internet has created avenues for individuals to stay connected on a new level that does not depend on space or time. Internet has transformed the modes of communication, speed of communication and this has a great impact on the global relationships. Though the concept of globalisation is old, Internet has given rapid promotion for the concept of Globalization. On line business platform has penetrated the market so rapidly. Social Media networking is playing great role in promoting the proliferation of communication. 'Reliance JIO' has made each and everyone to access internet in their smart phone. Students are busy in searching Internet and are less aware of their social surroundings, missing new social interactions. The danger is that many people do not know when to turn off their Internet. As I have conducted a research on the effect of internet on the development of students, it revealed many facts that, Internet has made the Globe as a single platform and it has increased the scope for new educational as well as Employment opportunities for the students. The Dynamics of Communication has broken the limitations of Global Economy.

Keywords: Internet, globalisation, communication, economy, employment, dynamics.

Dr. Bharti Verma &

- Dr. Nidhi Monika Sharma

ISCA-ISC-2019-17CLM-04-Oral

Role of entrepreneurs in the transformation of global economy

Bharti Verma* and Nidhi Monika Sharma
Bhilai Mahila Mahavidyalaya, Bhilai, Durg, Chhattisgarh, India
bharti7verma@gmail.com

Abstract: Entrepreneurs are the powerful engine of economic growth. They have the capacity to change the economy for few decades .Earlier he was expected to bear the risk and uncertainty but now beside this he is required to coordinate the productive resources in varied ways, he is expected to take active role in introduction of innovations. Development of western economies is the result of Entrepreneurship. For development of economy lack innovative entrepreneurs so efforts should be made to produce innovative and imitating entrepreneurs. Entrepreneurship is an indispensible ingredient in transformation of global economy. Business people take financial risks and responsibilities. They make new forms of business organization on a commercial basis. Both small and medium business in the global economy had significantly increased over the past 30 to 40 years. Globalization has opened a window to the rest of the world. The introduction of international business played a vital role for the formation of a new generation of entrepreneurs by providing new technologies, global market is increased mainly in the field of telecommunications and computers. By discovery and exploration of new small business owners are breaking the existing barriers in international trade revealing the endless potential for their own growth and transforming the global economy today.

Keywords: Entrepreneurs, economic growth, transformation, global economy, business, technologies.

- Dr. Nidhi Monika Sharma
  & Dr. Bharti Verma

ISCA-ISC-2019-17CLM-10-Oral

A study on exploring the transformation and dynamics of an emerging economy

Nidhi Monika Sharma* and Bharti Verma
Department of Commerce, Bhilai Mahila Mahavidyalaya, Bhilai, Durg, CG, India
nidhimonikasharma@gmail.com

Abstract: E-commerce is the boon in the modern business. E-commerce involves buying and selling of goods and services or the transmitting of funds or data, over an electronic network pre-dominantly the internet. E-commerce is a paradigm shift influencing both markets and the customers. Information technology is playing a vital role in the future development of financial sector and the way of doing business in the emerging economy. The advancement of communication and information technology has brought a lot of changes in all spheres of daily life of human being. E-commerce has a lot of benefits which add value to customer's satisfaction and their convenience in any place and enables the company to gain more competitive advantages over the other competitors. This study predicts some challenges in an emerging economy. The success of E-organization has been well reported in the news media in recent years.
Keywords: E-commerce, modernization, Information technology, Finance, Global emergence.

- Dr. Rajshree Sharma

ISCA-ISC-2019-17CLM-05-Oral

E-commerce in our daily life

Rajshree Sharma* and Vinay Sharma
Bhilai Mahila Mahavidyalaya, Bhilai, Durg, Chhattisgarh, India
sharmarajshree71@gmail.com

Abstract: E-Commerce is the online buying and selling platform which is extremely important in our daily life. The foremost reason behind the growth of internet users is social media and E-commerce. E-Commerce is as important to business as a heart to human body. E-Commerce has evolved to make a product easier to discover and purchase through online retailers & market places. An E-Commerce website will give you the opportunity to reach out offer your products and services to customers around the world regardless of distance and time zone. Potential buyers are more likely to make purchases when they can place their order instantly, rather than waiting for a regular store to open. We spend our daily time more on the internet for work, study, marketing, business, learning and entertainment. Now all these commercial and social activities are connected to the internet and without E-Commerce, the world around the Internet is impossible and it will scare you to imagine. So, E-Commerce is an important part of our life.
Keywords: E-commerce, business, buyers, internet, commerce.

Dr. Alpana Sharma

ISCA-ISC-2019-17CLM-06-Oral

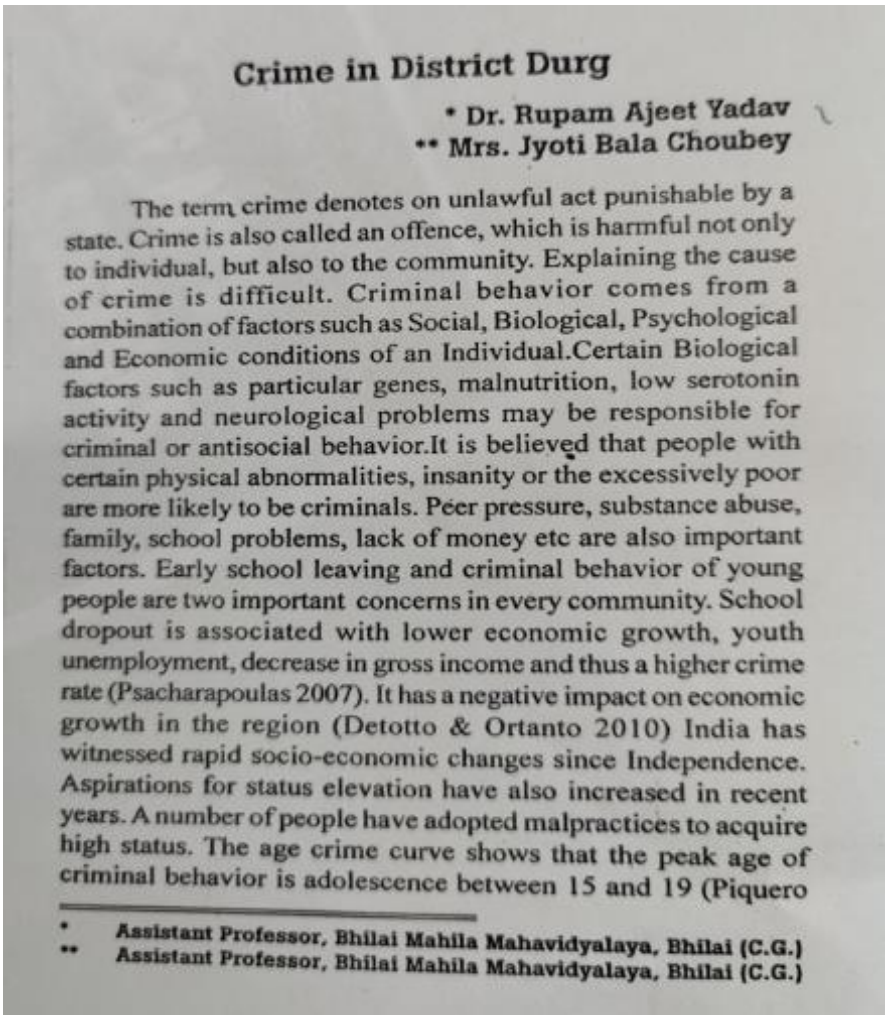
A study on financial literacy among women of Bhilai, CG, India

Alpana Sharma
Bhilai Mahila Mahavidyalaya, Bhilai, Durg, Chhattisgarh, India
sharmaalpana345@gmail.com

Abstract: As we know that a women are interested in financial matters, but less financial knowledge. Through the women face unique financial knowledge challenges to build a financially secure future. Financial literacy is a skill that is essential for everybody in today's economy. Low level of financial knowledge has far-reaching consequences, because financial literacy can be linked to important financial decision. A Minimum level of financial literacy is very essential for every woman so that they can live their life according to their own choices & can contribute to the healthy and prosperous life of their family as a whole. Women have enormous potential to contribute towards the growth of the economy hence a financially development women can be a great source of economic development. The purpose of this study was to give an overview about the financial literacy among women in an educationally advanced city like Bhilai.
Keyword: Financial literacy, financial decision, financial knowledge, skill, economic development.

HOME SCIENCE

Academic Year 2015-16



Crime in District Durg

* Dr. Rupam Ajeet Yadav
** Mrs. Jyoti Bala Choubey

The term crime denotes on unlawful act punishable by a state. Crime is also called an offence, which is harmful not only to individual, but also to the community. Explaining the cause of crime is difficult. Criminal behavior comes from a combination of factors such as Social, Biological, Psychological and Economic conditions of an Individual.Certain Biological factors such as particular genes, malnutrition, low serotonin activity and neurological problems may be responsible for criminal or antisocial behavior.It is believed that people with certain physical abnormalities, insanity or the excessively poor are more likely to be criminals. Peer pressure, substance abuse, family, school problems, lack of money etc are also important factors. Early school leaving and criminal behavior of young people are two important concerns in every community. School dropout is associated with lower economic growth, youth unemployment, decrease in gross income and thus a higher crime rate (Psacharapoulas 2007). It has a negative impact on economic growth in the region (Detotto & Ortanto 2010) India has witnessed rapid socio-economic changes since Independence. Aspirations for status elevation have also increased in recent years. A number of people have adopted malpractices to acquire high status. The age crime curve shows that the peak age of criminal behavior is adolescence between 15 and 19 (Piquero

* Assistant Professor, Bhilai Mahila Mahavidyalaya, Bhilai (C.G.)
** Assistant Professor, Bhilai Mahila Mahavidyalaya, Bhilai (C.G.)

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लेजर कम्पोजिंग-
अरविन्द कम्प्यूटर्स, रीवा (म0प्र0)

महिलाओं मे बढ़ रहा डिप्रेशन-चिंतनीय विषय

• श्रीमती ज्योति बाला चौबे
•• डॉ. श्रीमती रुपम अजीत यादव

हमारे समाज में पुरुषों की तुलना में महिलाओं की शारीरिक एवं मानसिक स्वास्थ्य की स्थिति बेहद चिंताजनक है। महिलायें चाहे घरेलू हों या कामकाजी हों उन्हें अपनी कार्य स्थिति एवं भूमिकाओं के अनुसार दायित्व निवहन करना ही होता है। परिवार में सभी की सेहत के प्रति सजग महिलायें आज तेजी से अवसाद ग्रस्तता की चपेट में आ रही हैं। इंडियन जरनल ऑफ सायकियाट्री में प्रकाशित एक शोध रिपोर्ट बताती है कि डिप्रेशन महिलाओं के जीवन की प्रत्येक अवस्था से जुड़ा हो सकता है चाहे उनका पारिवारिक जीवन हो, कैरियर से जुड़ा हुआ जीवन हो या फिर सामाजिक स्थितियों से जुड़ा हुआ। उपरोक्त सभी जीवन से जुड़े अतिशय दबाव, स्वयं से की गई अत्यधिक प्रत्याशायें, दोहरे उत्तरदायित्व महिलाओं में डिप्रेशन को तेजी से बढ़ा रहें हैं जो कि हमारी आगामी पीढ़ी के लिये भी एक चिंतनीय विषय है।

अत्यंत ही सार्थक परिभाषा जो कि विश्व स्वास्थ्य संगठन के द्वारा बताई गई है :- उसके अनुसार स्वास्थ्य का संबंध केवल व्यक्ति में रोगों की अनुपस्थिति का होना ही नहीं है, बल्कि व्यक्ति के शारीरिक के साथ साथ मानसिक एवं सामाजिक स्वास्थ्य की सकारात्मक स्थिति से भी है।

विश्व स्वास्थ्य संगठन की ये परिभाषा बहुत ही सामयिक एवं महत्वपूर्ण है क्योंकि हमारे समाज में पुरुषों की तुलना में महिलाओं की शारीरिक एवं मानसिक स्वास्थ्य की स्थिति बेहद चिंताजनक है । एक सर्वे के अनुसार मेट्रो मे रहने वाले हर दस पेशेवर लोगों मे से 4 व्यक्ति डिप्रेशन का शिकार हैं।

प्रो. कैमरॉन के अनुसार डिप्रेशन व्यक्ति की ऐसी "भाव-जन्य अस्वस्थता है" जो व्यक्ति मे आत्म- अवमूल्यन, निराशा, चिंता, हीनता एवं स्वयं की निरर्थकता से संबंधित हो सकती है।

महिलायें चाहे कामकाजी हों या घरेलू, जीवन की अलग अलग अवस्थाओं मे उन्हें

• सहायक प्राध्यापक, गृह विज्ञान मालथौन विकास, महिला महाविद्यालय मे. 9 भिलाई
•• सहायक प्राध्यापक, गृह विज्ञान अंजार एवं गोपाल महिला महाविद्यालय मे. 9 भिलाई

Rice straw, an abundant agricultural by-product in INDIA, is very difficult to degrade because of its high lignin content. Due to the immense environmental adaptability and biochemical versatility of bacteria, ligninolytic bacteria are useful resources for biodegradation. In this study, we screened for ligninolytic bacteria capable of biodegrading lignin from the agrofields of Bhilai-Durg . The bacteria were isolated from 2 types of soil samples and 11 lignin degrading bacterial colonies were found from the both soil samples. After morphological and biochemical identification results indicated that 11 colonies were 5 different bacterial species which have the degradation potential of kraft lignin and produced all three main ligninolytic enzymes. Result of present investigation also identified some new strains with lower lignin degradation potential.They may also have specific advantages for the depolymerization of the modified lignin residues typically encountered in waste streams from the pulping or 2nd generation biofuel/biobased chemicals industry. Rice straw, an abundant agricultural by-product in INDIA, is very difficult to degrade because of its high lignin content.

Myself Sabiha Naz, working as Assist. Professor in Biotechnology from last 6 years in Bhilai Mahila Mahavidyalaya, Bhilai(Pt.RS.S.U., Raipur)C.G., INDIA. I have completed my PG and M.Phil in Biotechnology.I have been published 16 research papers in national/international journals and completed 2 research projects granted from UGC and 1 is going on.

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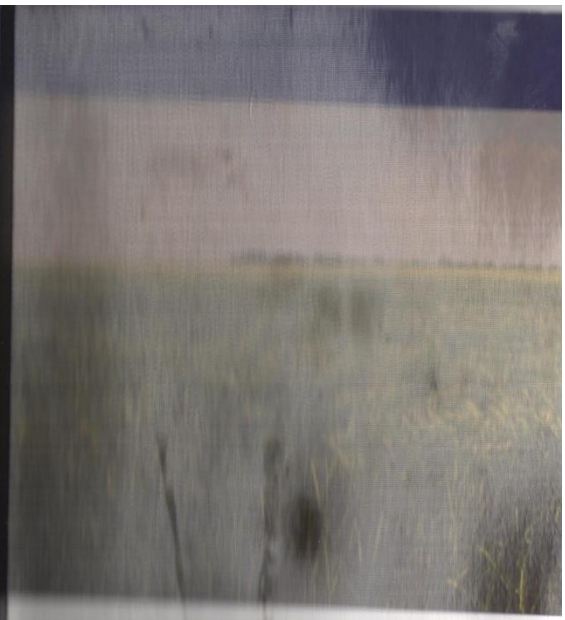

Sabiha Naz

Characterization and Identification of Naturally Ligninolytic Bacteria

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PHYTOCHEMICALS SCREENING OF PLANT LATEX (*CALOTROPIS PROCERA*)

***BHAVIKA SHARMA[1], TULJA DIVYA[2] AND BHAWANA PANDEY[3]**

[1,2]Department of Microbiology and Biotechnology,
Bhilai Mahila Mahavidyalaya, Hospital Sector, Bhilai
[3]Departmentof Botany & Microbiology
Govt. E. R. R. Postgraduate Science College, Bilaspur (Chhattisgarh).
*Corresponding Author:
E-mail: bhavika.bs2011@gmail.com

ABSTRACT

The medicinal plant Calotropis procera is content very important medicinal properties. In this study we used latex of this plant in various solvents ethanol, methanol and chloroform. Maximum all phytochemicals are present in this plant latex. The present study of Phytochemical screening of *Calotropis procera* showed the presence of many phytochemicals in methanol and ethanol extract in comparison to chloroform which showed few phytochemicals. Selected latex extract was showing many secondary metabolites are present.

Figures: NIL References:20 Table:01
Key Words: Plant latex, Phytochemicals, Phenolic Compounds, secondary metabolites.

Introduction

The term of medicinal plants include a huge variety of plants used in herbalism and some of these plants have medicinal activities. These medicinal plants consider as a rich sources of content which can be used in drug development and synthesis. World Health Organization (1978) has exponent traditional medicine as safe remedies for ailments of both microbial and non microbial origin. It was further added that the use of plant extracts and phytochemicals with antimicrobial properties may be of importance in therapeutic treatments, whereas in the past few years, a number of studies have been conducted in different countries to prove such efficiencies[1,2].

About 10% of flowering plants produce latex and are found in over 40 families including Euphorbiaceae, Apocynaceae, Caricaceae, Moraceae, Asclepiadaceae. Latex is milky fluid secreted by ducts of laticiferous tissue[4] *Calotropis* belong to Asclepiadaceae family. It is also known as Akada, Aak, Madar, Aakh etc. there are two species of *Calotropis*, procera and gigantea here we study about *Calotropis procera*. In recent years, secondary plant metabolites (phytochemicals) have been extensively investigated as a source of medicinal agents.[5] Known constituents of latex are proteins, alkaloids, tannins, terpens, starch, sugars, oils, resins, gums and enzymes. Plant latex has wider ethno pharmacological application which is used by tribal communities. Traditionally *Calotropis* is used alone or in combination to treat common diseases such as fevers, rheumatism, indigestion, cough, cold, eczema, asthma, elephantiasis, nausea, vomiting, and diarrhea in treatment of cold, asthma, catarrh, anorexia, inflammations and tumors. It is well known for its medicinal properties, different parts of this plant have been reported to exhibit analgesic and antioxidant properties.[3]

Material and Methods

Collection of latex- *C. procera* plants latex was collected randomly from Durg-Bhilai area of Durg District. The latex was collected in a clean glass beaker after that latex is subjected to dry at room temperature for overnight.

Extract Preparation – Then the dried latex (10gm) was extracted by using 100ml of organic solvents (Chloroform, Methanol and Ethanol). The Suspended solutions were left to stand for 4-5 days and resulting extract was filtered through Whatuman's filter paper and extract was collected in clean tube and plugged with cotton.

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A NEW TREND: CLAY MODELING

*SUDHA AGRAWAL[1] AND BHAWANA PANDEY[2]

Department of Zoology[1]
Department of Biotechnology and Microbiology[2]
Bhilai Mahila Mahavidyalaya,
BHILAI (C.G.) INDIA
*Corresponding Author,
E-mail: das572011@gmail.com

ABSTRACT

Animal dissection was introduced to the educational mainstream in the 1920s. At the time it was believed that the use of animals would help students learn the basics of anatomy, physiology, biology and theories of evolution. The government of India (2011) issued guidelines banning dissection and experimentation on animals for teaching students and now requires the use of modern non-animal methods instead. Educators at all levels are increasingly choosing alternatives to animal dissection to meet their students' needs in the classroom. These modern teaching methods—including interactive computer simulations and clay models—save animals' lives, cost less than animal dissection, are suitable for all students, and are more effective than animal dissections

Advancements in technology have led to the development of a variety of commercially available, interactive virtual dissection alternatives that provide students with three-dimensional views of animal organs, background information about the specimen being viewed, and anatomical comparisons of animals and humans. Advancements in technology have led to the development of a variety of commercially available, interactive virtual dissection alternatives that provide students with three-dimensional views of animal organs, background information about the specimen being viewed, and anatomical comparisons of animals and humans.

Instead of dissecting animals, students create small clay models of animal internal organs to demonstrate their understanding of the positioning and interlocking shapes of the organs. Not only is this approach more environmentally friendly, it also forces them to make clay models for undergraduate and post graduate students to learn animal anatomy in a creative and constructive manner.

Figures: 16 References:06 Tables:01.
KEY WORDS: Alternatives, Clay Models, Environmentally Friendly, Creative and Constructive

Introduction

Dissection has been used for centuries to explore anatomy. It is the dismembering of the body of a deceased animal or plant to study its anatomical structure. Live forms are dissected to analyze the structure and function of its components. Dissection is practiced by students in courses of botany, zoology, and veterinary science. Medical schools, students dissect human cadavers to learn anatomy. After animal dissection, the next most important aspect in Zoology in which large numbers of animals are collected by the animal suppliers is to make museum specimens for the study of classification, taxonomy, and phylogeny (biosystematics) [1234]. Dissection is used to help to determine the cause of death, in autopsy (called necropsy in other animals) and is an intrinsic part of forensic medicine.

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PHYSIOCHEMICAL AND MICROBIAL STUDY OF WATER QUALITY OF NON-RESERVED PONDS OF BHILAI- DURG

AKANKSHA CHAUHAN [1], *SABIHA NAZ [2] AND BHAWANA PANDEY [3]

[1] Govt.V.Y.T.P.G. College,
DURG (C.G.) INDIA
[2,3] Dept. of Biotechnology & Microbiology,
Bhilai Mahila Mahavidyalaya,
BHILAI (C.G.) INDIA
*Corresponding author:
E-mail:sabihanaz4@gmail.com

ABSTRACT

Water plays an important role in the development of healthy society. Water pollution occurs due to pollutant, which degrade the water quality of ponds, enter the waterway and alter their natural function. The increased demand for water as a consequence of population growth, agriculture and industrial development has usurped environmentalists to determine the chemical, physical and biological characteristics of natural water resources.

In present investigation the physicochemical (taste, odor, color, pH, temperature, alkalinity, total dissolved solids, chemical oxygen demand, biological oxygen demand, total hardness) and microbial parameters of collected samples from Kham Pond, Shitla Pond and Kosala non-reserved ponds were done.

Results of physiochemical parameters were compared with limits prescribed by WHO standard (1984) and analyzed higher than the give standard value of the WHO for drinking and human uses. Studies of microbial flora (bacterial and fungal) of non-reserved ponds were observed NR1-three, two NR2-two, four and NR3-two, four colonies. The Morphological and Biochemical characteristics for identification of the isolates were done. The isolated bacterial and fungal species were identified with reference to Bergey's Manual of Determinative Bacteriology and book for Fungal Identification. These identified bacterial and fungal isolates include *Staphylococcus* sp., *Streptococcus* sp., *Micrococcus* sp., *Pseudomonas* sp., *Aspergillus niger, Aspergillus fumigatus, Aspergillus flavus*, and *Fusarium sp.* Present investigation concluded that the maximum parameters were exceeding the level of pollution except few parameters. All three ponds water not satisfied the requirement for the domestic use. The study of non-reserved pond water indicated that the community ponds are highly polluted and unsafe for human use.

Figures: 06 References:13 Table:06
KEY WORDS: Physicochemical, Morphological characteristics, Total dissolved solids, Chemical oxygen demand and Biological oxygen demand

Introduction

Water is the most abundant and most useful compound in the world and hence it is called 'Jeevan' in Sanskrit. Life is not possible without water. 70% surface of earth is covered by water, Majority of water available on the earth is saline in the nature only 3 % of exists as fresh water. Fresh water has become a scare commodity due to over exploitation and pollution [1,2]. Water bodies get polluted due to the discharge of effluents from the industries, domestic waste, land and agricultural drainage and degrade water quality [4].

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PREVALENCE OF INDOOR AIR BORN FUNGI IN BHILAI MAHILA MAHAVIDYALAYA, BHILAI

PRATIKSHA PANDEY[1], BHAWANA PANDEY[2] AND *SADHANA GUPTA[2]

[1]Department of Botany,
Bhilai Mahila Mahavidyalaya,
BHILAI (C.G.) INDIA
[2]Department of Biotechnology and Microbiology,
Bhilai Mahila Mahavidyalaya,
BHILAI (C.G.) INDIA
*Corresponding author:
E-mail: sadhnagupta1111@gmail.com

ABSTRACT

Museum items, books, furniture of Zoological museum, Botanical museum, Library and open combine area of Bhilai Mahila Mahavidyalaya, Bhilai have been examined as a possible source for the introduction of indoor particles specially indoor airborn mold which causes multisystem adverse human health effects the present study aimed the occurrence of indoor fungal flora, identification and isolation in Bhilai Mahila Mahavidyalaya, Bhilai (Durg) during Jan. 2015- Feb. 2016, A. fumigatus, A. niger and Penicillium shows the highest frequency whereas Wallemia spp. and A. ustus had the lowest frequency of occurrence. Conclusively, fungal flora is occurred in indoor atmosphere including infectious and toxigenic species. Therefore attention should be given to indoor air atmosphere of Bhilai Mahila Mahavidyalaya, Bhilai (Durg).

Figures: 05 References: 08 Table: 06
KEY WORD - Indoor, Air, Atmosphere, fungal flora.

Introduction

Indoor atmosphere is made up of numerous air born particles including bacteria, fungi, pollens, allergens and dusts. A typical indoor atmosphere such as home, workplace, school, colleges, showrooms etc, the level of microbial populations are influenced by occupant and their activity and internal maintenance practices microbes get enter into indoor atmosphere through wind current and settle down on various objects Fungi are the major groups of biodeteriogents and are responsible for degradation and deterioration of various objects including museum and library [1]. Molded, Mounted, Specimens stuffed materials plant species, birds, Mammals, skeletons, books and other literature are also affected by microbes, fungal and other pests. Therefore the present study was taken. The primary goal of the study was to examine the fungal flora found in indoor environment of the Bhilai Mahila Mahavidyalaya. The Mahavidyalaya was situated in the prime location of Durg-Bhilai twin city was studied. related investigation of such type was that of [2,3].

Material and Methods

The study of fungal flora and their frequency, isolation, identification in the indoor atmosphere of the Bhilai Mahila Mahavidyalaya was done from JAN 2015- Feb 2016.

The climate of the city is moderate but in summer season the temperature goes to maximum 40-46°C and in the winter season the minimum temperature falls up to 7°C. The average rainfall is approximate 1125mm/year. Sampling was done in various places of college i.e. office, teaching room, Verandah, Botanical Museum, Zoological Museum and Library. Total of twelve samples in all within the premises of Bhilai Mahila Mahavidyalaya. Sampling was done by using the culture plate exposure method. Three petri-plates were exposed (5-7 min.) in the indoor air. These incubated at 25±2°C for seven to ten days. Nutrient plates were maintained on PDA (Potato Dextrose Agar) and MEA (Malt Extract Agar). This procedure was carried out in triplicate forms. Fungal growth were

STUDY OF FUNGAL MICROFLORA FROM NON-RESERVED PONDS OF BHILAI, CHHATTISGARH

SABIYA PARVEEN[1], *BHAWANA PANDEY[2], SHEETAL SINGH[3] AND DIVYA PAIKARA[4]

[1]Department of Microbiology,
C.P.M. Arts and Science College,
SARANGARH (C.G.) INDIA
[2,3,4] Department of Microbiology and Biotechnology,
Bhilai Mahila Mahavidyalaya,
BHILAI (C.G.) INDIA
*Corresponding Author:
E-mail.: bhawanapandey15@gmail.com

ABSTRACT

Water is the most abundant and most useful compound in the wodd and hence it is called 'Jeevan' in Sanskrit. Life is not possible without water. 70% surface of earth is covered by water, Majority of water available on the earth is saline in the natuse only 3 % of exists as fresh water. Fresh water has become a scare commodity due to over exploitation and pollutioncertain microorganisms, including various bacteria, viruses, and parasites, are well-known water contaminants, of which several may lead to waterborne disease and epidemics[2]. The aim of the present work is to study the microbial flora comprising their isolation and characterization from Reserved and Non-Reserved Ponds of Bhilai, Chhattisgarh.

Figures: 28 References: 07 Table: 02

KEYWORDS: - Water, Pond, Micro organisms, Reserved and Non-Reserved Ponds.

Introduction

Discharge of domestic sewage and industrial effluents has resulted in pollution of natural water sources. Safe water resources are very important in our country as Health of human and other organisms are directly related with it. In most of the developing areas, it is found that people become ill due to lack of safe drinking and utility water [4-7]. The role of water in spreading communicable diseases is much evident due to combined source of water i.e. drinkers. Contaminated water with faecal coliform severely affects the performance of humans. Numerous human diseases having bath in rivers, lakes, ponds and coastal sea waters in the area of river and sewage inflow, swimming pools are associated with the presence of opportunistic pathogens *Aspergillus sp.*, *Alkenaria sp.*, *Curvularia sp.* and other microorganisms groups, being able to generate infections by contact with skin, mucous membrane, nasopharyngeal cavity, respiratory ducts, eyes, ears and urogenital passages. Pyogenic infection of injuries, meningitis, urinary system, respiratory system, inflammation of the middle ear and eyes are typical diseases caused by contaminated water where are found [4,8].

Material and Methods

Sample Collection

Water samples were collected from two different ponds viz. Jawahar udyan pond, and Sheetla pond, Bhilai.

Isolation of Micro organisms from water samples

Potato Dextrose Agar Media (PDA) was used for the isolation of Fungi Isolation was done by serial dilution method. After incubation distinct colonies were counted and identified. The cultures were identified on the basis of macroscopic (colonial morphology, colour, texture, shape, diameter and appearance of colony) and microscopic characteristics.

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PHYTOCHEMICALS AND ANTIMICROBIAL SCREENING OF *BOERHAVIA DIFFUSA*

BHAGYASHREE DESHPANDE[1], DEVYANI SHARMA[2] AND BHAWANA PANDEY[3]

[1, 2] School of Biological Sciences and Chemical Sciences,
MATS University, RAIPUR (C.G.) INDIA
[3] Department of Biotechnology and Microbiology,
Bhilai Mahila Mahavidyalaya,
BHILAI (C.G.) INDIA
*Corresponding Author.
E-mail.: bhagyashree.deshpande851@gmail.com

ABSTRACT

The present study is based on phytochemical and antimicrobial screening of *Boerhavia diffusa*. For the plant extraction we used three solvents viz. methanol, ethanol and petroleum ether. Phytochemical analysis revealed that alkaloids, flavonoids, Terpenoids etc are present. For antimicrobial analysis we used three sets of gram positive, gram negative and fungus. *Boerhavia diffusa* exhibited antimicrobial activity against all the test organisms in all extracts, where maximum zone of inhibition was found against *Micrococcus luteus* and *Aspergillus flavus* in ethanolic extract. These result shows that *Boerhavia diffusa* can be used as an antimicrobial agent.

Figures: 02 References: 18 Table: 03

KEY WORDS: *Boerhavia diffusa*, Antimicrobial, Wood Plants

Introduction

For treatment of infectious diseases on Earth pharmacologists, microbiologists, and natural-products chemists are relying on plant derived dietary supplements as well as phytochemicals[1-3]. The exploration of the chemical constituents from plants, pharmacological and phytochemicals screening would provide the basis for developing the new lead molecules in strategic favour of natural product drug discovery. The aim and subject of many researchers is the discovery and development of isolating a new efficient, active and less toxic molecule for systemic activities. The biologically active agents from natural sources have always been of great interest to working on various diseases[4, 12]. The medicinal value of the plant lies in the bioactive phytochemicals constituents that produce definite physiological actions on the human and animal body. A phytochemical is a natural bioactive compound found in plant foods that works with nutrients and dietary fiber to protect against disease. The compounds which occur naturally in plants are referred as Phytochemicals. Some of these phytochemicals are responsible for colour and other organoleptic properties, like the deep purple of blackberries and the smell of garlic Compounds containing potential medical use as well for protection from pathogens different compounds are produced by plants [5,6]. suggests that phytochemicals, working together with nutrients found in fruits, vegetables and nuts, may help to slow the aging process and reduce the risk of many diseases, including cancer and heart diseases. Some of the most important bioactive phytochemicals constituents are the glycosides, alkaloids, flavonoids, tannins, steroids, Terpenoids, essential oils and phenolic compounds[7]. An antimicrobial is a compound that can kill microorganisms or inhibits the growth of microorganisms. Antibacterial which is also called as antibiotics, are used in against of bacteria and antifungals are used in against of fungi. They can also be classified according to the function they perform[13].

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ISOLATION AND SCREENING OF FUNGAL STRAINS FORM PADDY FIELD SOIL FOR PRODUCTION OF LIPASE

***CHITRA BHATTACHARYA[1], ASHIS KUMAR SARKAR[2] AND BHAWANA PANDEY[3]**

[1,2] School of Biological & Chemical Sciences,
MATS University, RAIPUR (C.G.) INDIA
[3] Department of Biotechnology & Microbiology,
Bhilai Mahila Mahavidyalaya,
BHILAI (C.G.) INDIA
*Corresponding Author:
E-mail. : chitra16b@gmail.com

ABSTRACT

Three different fungal strains of *Aspergillus* sp. were isolated and screened. These isolates were identified on the basis of morphological and microscopic studies. Among these fungal strains, *Aspergillus fumigatus* given best results for these studies. Olive oil substrates were optimized and maximum lipase activity of 85.51 U/g was observed at pH 7.0. Maximum lipase activity was observed for an incubation period of 72 hrs at 30°C.

Figures: 08 References:08 Table:05
KEY WORDS: *Aspergillus* spp., Lipase enzyme, Olive oil.

Introduction

Lipases are hydrolytic enzymes that *break* the ester bond of triglycerol, free fatty acids and glycerol. In its natural function, lipases can catalyze esterification, interesterification and transesterification reactions in non-aqueous media[1]. Fungi are widely recognized as the best lipase sources and are used preferably for industrial applications. Uses of waste biomaterials for biotechnological products, especially enzymes, have been noticed in the recent years. Solid substrate fermentation (SSF) has built up credibility in recent years for the production of different microbial products including enzymes through inexpensive media. Lipases can be found in animal and vegetable cells. Certain micro-organisms are the source of choice for lipase productions. Lipase enzymes are currently attracting an enormous attention for their biotechnological potential. Among the lipases sources, the microbial enzymes are preferred due their low cost, high stability in organic solvents (which are mostly used in synthesis reactions), no need for cofactors and large range of pH and temperature stabilities[2].

To obtain the microbial enzymes, two processes can be employed: submerged fermentation (SmF) and solid-state fermentation (SSF) [3]. The SSF is the process where substrate given to the microorganism is solid, being moistened by a nutritious solution or a buffer solution. This process appears useful as it allows the use of widely available agro industrial residues which naturally stimulate natural species of fungi and other microorganisms known to possess high performance and adaptability[1]. It is important to mention that the use of agro-industrial residues as substrates in the production of lipase by solid-state fermentation can significantly reduce the final price of enzyme and also add value to low cost materials on the market.

Material and Methods

Sample Collection & Isolation of lipase producers: The soil sample was collected from paddy field located at Dist.-Durg, Chhattisgarh enriched by periodic sub-culturing of sample in Potato Dextrose Agar (PDA) media.

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COMPARATIVE STUDY OF PHYTOCHEMICAL ANALYSIS OF INDIAN SPICES

*BHAWANA PANDEY[1] AND SHABINA KHAN[2]

[1,2]Department of Microbiology and Biotechnology,
Bhilai Mahila Mahavidyalaya,
BHILAI (C.G.) INDIA
*Corresponding Author.
E-mail: bhawanapandey15@gmail.com

ABSTRACT

Spices have been added to foods since ancient times, not only as flavoring agents, but also as folk medicines and food preservatives. The current investigation deals with the extraction and phytochemical analysis of cinnamon (*Cinnamomum zeylanicum*), black pepper (*Pepper nigrum*), clove (*Syzygium aromaticum*), turmeric (*Curcuma domestica*), ajwain (*Trachyspermum ammi*) which are one of the most important spices used in India. The presence of phytochemicals including , alkaloids, phenolic compounds, tannins, glycosides, flavonoids, and terpenoids, were determined and proved to have the potential to act as a source of useful drugs and also to improve the health status of the consumers as a result of the presence of various compounds that are essential for good health.

Figures: NIL References: 09 Table: 01
Key Words: Spices, Phytochemicals, Phenolic Compounds, Tannins, Glycosides, Flavonoids.

Introduction

The world is rich with natural and unique medicinal plants. Medicinal plant are now getting more attention than ever because they have potential of myriad benefits to society, especially in the line of medicine and pharmacological[2]. Plants have been used to treat or prevent illness since before recorded history. Spices have been used for not only flavor and aroma of the foods but also to provide antimicrobial properties[3]. Some of the natural compounds found in various spices possess antimicrobial properties[4].

Phytochemical are plant chemicals that have protective or disease preventive properties. There are many phytochemical and each work works differently. Most phytochemical have antioxidant activity and protect our cells against oxidative damage and reduce the risk of developing types of cancer[1]. Phytochemicals are two types based on their function in plant metabolism, primary and secondary constituents. Primary constituents comprises common sugars, amino acid, protein, chlorophyll while secondary constituents consist of alkaloids, terpenoids, flavonoids, and phenolic compound and so on[5].

Keeping in view this fact the present study was conducted to five spices including Clove (family Myrtaceae), Cinnamon (family Lauraceae), Black pepper (, family Piperaceae) Turmeric (family Lauraceae.)

and, Ajwain, (family Apiaceae) have been investigated phytochemically and the fraction submitted to biological screening is even smaller.

Material and Methods

Spices: The spices namely cinnamon (*Cinnamomum zeylanicum*), black pepper (*Pepper nigrum*), clove (*Syzygium aromaticum*), turmeric (*Curcuma domestica*), ajwain (*Trachyspermum ammi*) were used for the present study collected from the local market.

Preparation of Spice Extract

Extract of each spice was prepared by 30g of dry spice in 300ml acetone and methanol for 48hrs

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STUDY OF ENDANGERED GRASSES OF DURG BHILAI REGION

*BHAWANA PANDEY[1], PRATIKSHA PANDEY[2] AND LATA MESHRAM[3]
[1]Department of Biotechnology and Microbiology,
Bhilai Mahila Mahavidyalaya,
BHILAI (C.G.) INDIA
[2]Department of Botany,
Bhilai Mahila Mahavidyalaya,
BHILAI (C.G.) INDIA
[3]Department of Zoology,
Dr. W.W. Patankar Govt. Girls College,
DURG (C.G.) INDIA
*Corresponding Author:
Email: bhawanapandey15@gmail.com

ABSTRACT

Chhattisgarh state is newly born state known for rich biological diversity and lush greenery. Durg- Bhilai twin city is famous for Bhilai Steel Plant and also for plantation of surroundings barren and open land and gochhar land for live stock. But the scenario is totally changed in early decades. There is vast changes observed in the vegetation physiognomy of the district, due the cutting down of forests clearing of area for increased agricultural operations, construction of dams, roads, bridges etc.

Present study was based on two years of extensive and intensive survey. The study was conducted in various habitat of Durg-Bhilai region. The important studies area e. g. river bank, open barren land, different rural and urban areas selected for sampling of grassland vegetation.

During the course of study total 148 grasslands vegetation were recorded belonging to the 35 families in which Fabaceae and Asteraceae were recorded as most dominant family, family Fabaceae is most dominant family in tree/ shrub group in herbaceous group 60 plant species were recorded in which family Fabaceae, Asteraceae, Malvaceae, Euphorbiaceae were the most dominant family [1].

Figure: Nil References:11 Table:01
KEY WORDS: Open Barren Land, Dominant Family, Live Stock, Diversity and Lush Greenery.

Introduction

India is basically an agricultural country with more than 70% of its population living in the rural areas. The rural population is dependent mainly on agriculture and animal husbandry for their sustenance. India with about 2% of the total world's geographical area sustain as much as 15% of the total world's livestock population which plays a significant role in country's rural economy's for demand for milk, milk products, meat wool, hides and bone manures etc. in present scenario the population growth of both human beings and livestock population has been increasing day by day and the land under permanent pastures has shrinked. This has further complicated the situation about 40% of total cultivable land (AIRPFC 1995) and culturally wasteland is put for fodder crops which are occupying nearly 10% each. This area is being utilized for growing forage grasses and legumes and so called grasslands and pastures.

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PHYSIO-CHEMICAL ANALYSIS OF INDUSTRIAL EFFLUENTS OF WASTE WATER FROM DURG BHILAI, CHHATTISGARH

*VARSHA CHANDRAKAR[1], DEVYANI SHARMA[2] AND BHAWANA PANDEY[2]

[1]: School of Biological Sciences and Chemical Sciences,
MATS University, RAIPUR (C.G.) India
[2] Department of Biotechnology and Microbiology,
Bhilai Mahila Mahavidyalaya,
BHILAI NAGAR, (C.G.) India
*Corresponding Author:
Email chandravarsha2886@gmail.com

ABSTRACT

In this study Sample s will be collected from 10 different industries surrounding Durg- Bhilai (Twin city). These industries are: Bhilai Steel Plant, Risali (S-1), Bhilai Food corporation, Bhilai (S-2), Kodia Distillery, Bhilai (S-3), Paper Industry, Kumhari, Durg (S-4), ACC cement, Jamul, Bhilai (S-5), Dairy Industry, Devbhog, Durg (S- 6), Bhilai Fertilizer Factory, Risali, Durg (S- 7), IBI Group of Oil refinery, Durg (S-8), Glucose Industry, Durg (S-9), Rice Bran Oil Mill, Dhamdha, Durg (S-10). Industrial effluents are characterized by their abnormal turbidity, conductivity, chemical oxygen demand (COD), total suspended solids (TSS), biological oxygen demand (BOD), and total hardness. pH of all samples was acidic. EC range between all samples was 1231-1666 (µmho/cm). BOD of S-10 is shows highest (222.6mg/L) and S-1 shows lowest BOD (8.4mg/L). S-7 Show highest COD (48mg/L) and S-10 shows lowest COD (19mg/L). All Industrial Water samples compared with the WHO and US-EPA standards established for drinking water. The result shows that all samples are contaminated.

Figure: Nil References(8) Table:01
KEY WORDS: Industrial effluents, Distillery, Turbidity, Conductivity, Chemical Oxygen Demand

Introduction

Environmental pollution has been recognized as one of the major problems of the modern world. The increasing demand for water and the dwindling supply has made the treatment and reuse of industrial effluents an attractive option. Industrial effluents are of concern because they colour the drains and ultimately the water bodies. They also diminish the water quality. Industrialization is vital to a nation's economy because it serves as a vehicle for development. However, there are associated problems resulting from the introduction of industrial waste products into the environment. Many of these products are problematic because of persistence (low biodegradability) and/or toxicity. Worldwide water bodies are the primary means for disposal of waste, especially the effluents, from industries that are near them.

These effluent from industries have a great deal of influence on the pollution of the water body, these effluent can alter the physical, chemical and biological nature of the receiving water body[6]. The initial effect of waste is to degrade the physical quality of the water. Later biological degradation becomes evident in terms of number, variety and organization of the living organisms in the water [1]. Industries turn out wastes which are peculiar in terms of type, volume and frequency depending on the type of industry and population that uses the product[7]. Industrial waste is the most common source of water pollution in the present days[4] and it increases yearly due to the fact that industries

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EXPLORING ENDOPHYTIC FLORA OF SOME ANGIOSPERM PLANTS OF CHHATTISGARH

*CHAITALI Y. MATHEW[1] AND BHAWANA PANDEY[2]

[1]School of Biological Sciences and Chemical Sciences,
MATS University,
RAIPUR (C.G.) INDIA
[2]Department of Biotechnology and Microbiology,
Bhilai Mahila Mahavidyalaya,
BHILAI (C.G.) INDIA
Corresponding author:
E-mail: yadav3015@gmail.com

ABSTRACT

In present study five angiospeem plants were chosen from three different districts of Chhattisgarh. 31 endophytic microbes were isolated from 45 plant samples. The samples were excised aseptically for isolation of endophytes. Nutrient Agar media and Potato dextrose media. The crude metabolite of endophytic *Aspergillus* fungus exhibited significant antimicrobial activity against all test pathogen.Phytochemical analysis of ethyl acetae.extract revealed presence of phytochemicals likeglucoside, lignan, carbohydrates and tanins. The study revealed production of bioactive compounds by *Aspergillus* and *Mucor*.

Figures: NIL References:11 Table:07
KEY WORDS: Endophyte, crude extract, *Aspergillus*, *Mucor*, Antimicrobial.

Introduction

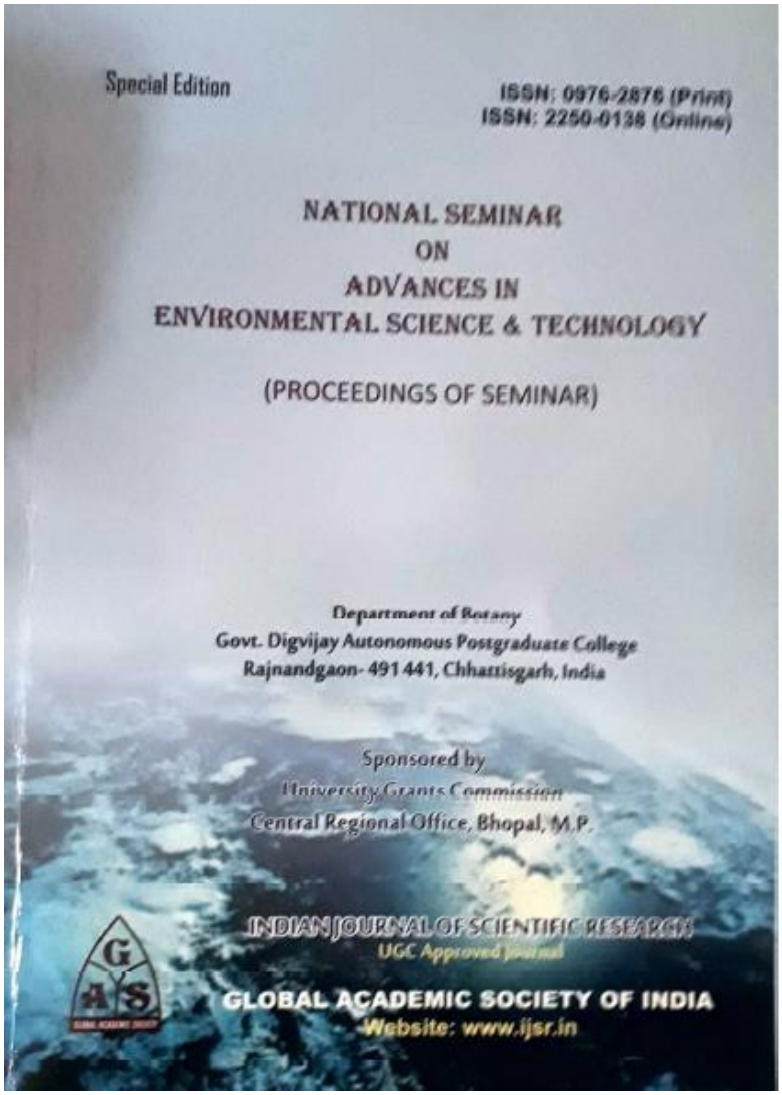
Endophytes are group of microorganism that colonize inside host plant at intra cellular level[1,2]. The term endophyte by its definition accommodate bacteria[3], fungi[4,5], actinomycetes[1,6,11], algae[7] and insect[8] populate inside the plant tissue without causing any probable disease symptom. Definition of endophytes and lay emphasis on concept proposed[9,10] and remarked that *"All organism inhabiting plant organs that at some time in their life can colonize internal plant tissues without causing harm to host.*

Material and Methods

Samples were randomly chosen from 15 plant growing in 3 different fields of Chhattisgarh region i.e. from Raipur, Durg and Balod district with geographical coordinates of 21.1797° N, 81.7787° E, 21.1623° N, 81.4279° E, 20.7750° N, 81.2519° E respectively . The study was conducted from the period of December 2013 to December 2014.The tissue samples from stem, leaf, and fruit/seed /tuber were collected from Flax plants *(Linum usitatissimum)*, Cauliflower (*Brassica Oleracea*), Cucumber (*Cucumis sativus*), Turnip (*Brassica rapa*) and Wheat (*Triticum aestivum*) plants respectively .

Isolation of endophytes: Collected plant samples were washed to remove surface adherent. Approx (1x1cm) of each selected plant species. Two different sterilization protocol were refered [4] with modification like change in sterilising agent and treatment time in order to standardizing the protocol. Sterilized segment of plant species were imprinted on Potato Dextrose Agar and Nutrient agar media. Absence of colonies from imprint indicates successful sterilization of plant material. The sterilize segment after incubation at28+-10C and 37+- 10C were regularly observed for microbial growth. Pure endophytic culture were made and used as stock culture for further experiment

Identification of endophytes: Morphological characteristics of isolated endophytic bacteria and fungi: fungi were identified during sporulating stage on the basis of morphological characteristics and microscopic identification was done by lactophenol blue staining technique. Whereas bacteria were characterised by both gram staining and biochemical tests. Identification of bacterial isolates was also aided PIBWIN software analysis.



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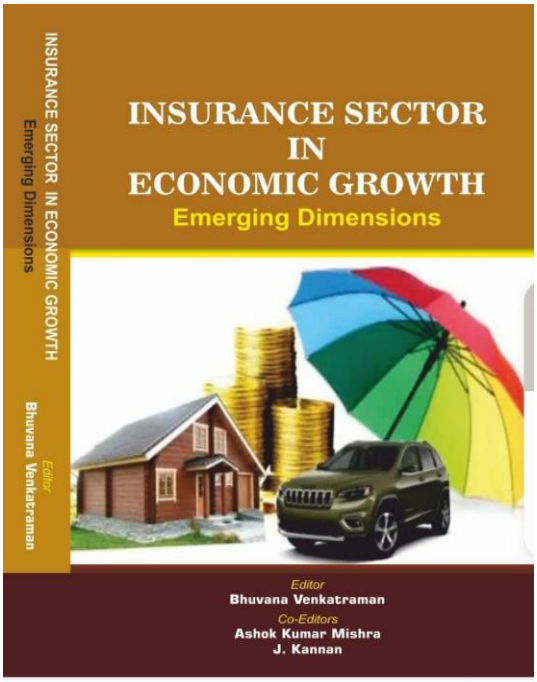

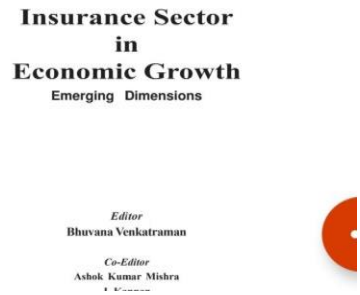

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CONTENTS

plans and take steps to continue operations with a minimum of disruption to clients.

If they haven't already done so, insurers should consic establishing cross-functional, emergency decision-making teams coordinate the organization's response, set new safety protocols, a assure quicker action as conditions continue to evolve.[1] comprehensive communications system should also be in place keep employees, distributors, and clients fully informed about t status of business continuity plans and instructions on how to rema personally safe.

One of the biggest challenges could be enabling alternati work arrangements for insurance company employees if needed protect staff and adapt to possible office access restrictions, all wh assuring business continuity.

Emphasis on efforts to contain the spread of COVID-19 m mean enabling insurance company staff—from actuaries to underwriters to claims managers—to work offsite, most likely from home. Insurers should ascertain whether employees can access necessary files and conduct business from remote locations. In addition, chief information security officers (CISOs) may need to establish new cyber security protocols to permit the safe exchange of confidential information among employees connecting from outside the office.

Many organizations are setting policies around remote access to support social distancing. As companies move toward remote protocols, chief information officers, chief technology officers, and CISOs should ensure that offsite workers have access to the following technology capabilities:

- A laptop or desktop computer, preferably equipment issued by the company
- A virtual private network to securely and remotely connect to critical business applications
- Collaboration tools to help with audio, video, and screen-sharing
- An adequately equipped and staffed IT support team to answer employees' questions and help them continue to do their jobs remotely

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किशोरों पर वैश्विक महामारी का प्रभावः मानसिक स्वास्थ्य पर एक चुनौती

•श्रीमती ज्योति बाला चौबे
••डॉ. श्रीमती रूपम अजीत यादव

हाल ही में न्यू इंग्लैंड जर्नल ऑफ मेडिसिन में एक प्रकाशित यूनिवर्सिटी ऑफ ओक्लाहोमा के सायकियेट्री प्रोफेसर बेट्टी पेफरबॉम ने अपने रिसर्च पेपर में उन कारकों की पहचान की है जो चिंता, तनाव एवं निराशा बढ़ाने का काम करते है। उन्होंने बताया महामारी की अनिश्चितता, उपचार संसाधनों में कमी, तंगी, लोगों में असुरक्षा की भावना पैदा करती है। भारत के सन्दर्भ में क्वारंटीन एवं सोशल डिस्टेंन्सिंग जैसे शब्द भी व्यक्तिगत स्वतंत्रता को बाधित करने वाले है, निराशा का माहौल उत्पन्न करने हेतु पर्याप्त है। हम क्या सोचते हैं? हमारे किशोर बच्चों पर इनका प्रभाव क्या नहीं पड़ेगा? निश्चितत: कोविड ।9 के काल की ये भावनात्मक निराशाएं मनोविकारों को बढ़ाने में योगदान देंगी। सभी मनोवैज्ञानिक इस विषय पर एकमत है कि ऐसे मानव भय व चिंताओं का प्रभाव हमारे शरीर ,मस्तिष्क, हमारी भावनाओं एवं व्यवहारों पर पड़ता है।

किसी भी वैश्विक महामारी का मनोवैज्ञानिक परिणाम हम सब के मनोसामाजिक स्वास्थ्य को प्रभावित करता है और सामाजिक ताने-बाने को भी अछूता नहीं छोड़ता, चाहे व्यक्ति वायरस से प्रभावित रहा हो या नहीं भी रहा हो। विश्व स्वास्थ्य संगठन के प्रथम महानिदेशक ब्रॉक चिशहोम,जो कि एक मनोरोग चिकित्सक भी थे उनकी प्रसिद्ध उक्ति है कि- बगैर मानसिक स्वास्थ्य के उचित शारीरिक स्वास्थ्य की स्थिति को नहीं पाया जा सकता है। मानसिक और शारीरिक स्वास्थ्य बुनियादी तौर पर एवं अभिन्न रूप से आपस में जुड़े हुए है, चूँकि व्यक्ति एक समाज में रहता है, इसीलिए व्यक्ति का मनोसामाजिक स्वास्थ्य उसके शारीरिक स्वास्थ्य की दशा पर भी निश्चितत: असर डालता है।

• असिस्टेंट प्रोफेसर-मानव विकास, भिलाई महिला महाविद्यालय, सेक्टर-९ भिलाई
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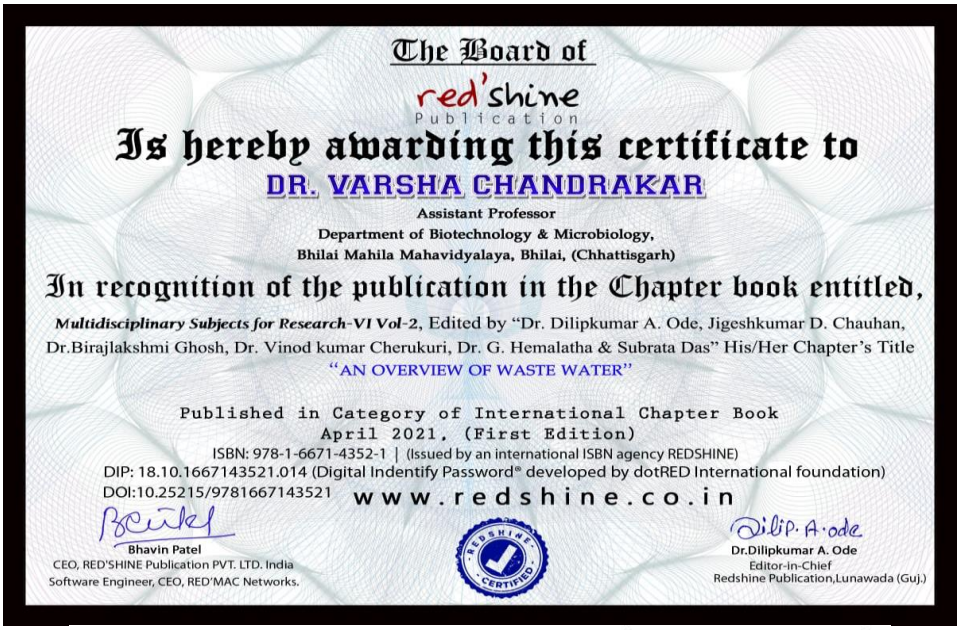

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AN OVERVIEW OF WASTE WATER

DR. VARSHA CHANDRAKAR
Assistant Professor
Department of Biotechnology &Microbiology,
Bhilai Mahila Mahavidyalaya, Bhilai, (Chhattisgarh)

DR. BHAGYASHREE DESHPANDE
Assistant Professor
School of Sciences,
MATS University, Raipur (Chhattisgarh)

❖ INTRODUCTION

Water is an indispensable natural resource essential for the existence of man and the ecological system. Though water is abundantly available in the universe, only 3% of it is fresh water. Approximately, 5% of the fresh water, equivalent to 0.15% of the entire global waters is readily accessible for beneficial purposes[1]. In addition, water serves as an important resource for proper running of industries[2] with a majority ending up as industrial wastewater[3]. In the last few decades, anthropogenic activities coupled with rapid urbanization and industrialization have brought about ecological pressure on aquatic environment which directly or indirectly affects human health. The aquatic ecosystem often gives a reflection of extent of environmental degradation from various anthropogenic activities.[4]

❖ WASTEWATER

Wastewater is water whose physical, chemical or biological properties have been changed as a result of the introduction of certain substances which render it unsafe for some purposes such as drinking. The day-to-day activities of man is mainly water dependent and therefore discharge 'waste' into water. Some of the substances include body wastes (faeces and urine), hair shampoo, hair, food scraps, fat, laundry powder, fabric conditioners, toilet paper, chemicals, detergent, household cleaners, dirt, micro-organisms (germs) which can make people ill and damage the environment[5].In the most common usage, it refers to the municipal wastewater that contains a broad spectrum of contaminants resulting from the mixing of wastewaters from different sources.

❖ CLASSIFICATION OF WASTEWATER

Wastewater can be broadly classified into three types depending upon the source from which it is obtained.

I. **Stormwater Runoff :-** is water from streets, open yard etc after a rainfall event which run through drains or sewers

II. **Industrial wastewater**

It is liquid waste from industrial establishments such as factories, production units etc. The industrial wastewater discharged directly from different industries such as electroplating, lock manufacturing, small scale industries, die casting, meat production industries etc. This is discharged by manufacturing processes and commercial enterprises.[8] Process wastewater can contain rinse waters including such things as residual acids, plating metals, and toxic chemicals. The industrial wastewater contains industrial site drainage (silt, sand, alkali, oil, chemical residues, heavy metals), Industrial cooling waters (biocides, heat, slimes, silt), Industrial process waters, Organic or bio-degradable waste, including waste from abattoirs, creameries, and ice cream manufacture, Organic or non biodegradable/difficult-to treat waste (pharmaceutical or pesticide manufacturing), extreme pH waste (from acid/alkali manufacturing, metal plating), Toxic waste (metal plating, cyanide production, pesticide manufacturing, etc.), Solids and Emulsions (paper