Research Papers of Teachers published in reputed journals`

Title of Paper	Name of the author/s	Dept.of the teacher	Name of journal	Year of Publication	ISBN/ISSN number	Link to there cognitionin UGC enlistment of the Journal /Digital Object Identifier (doi) number		
						Link to website of the Journal	Link to article/paper /abstract of the article	Is it listed in UGC Care list
In-vitro Micropropagation of Medicinal plant *Adenantherapavonina* L.	Deepali Wankhade, S.P.Rohte	Principal	Int.J.Adv. Res. &Innovative Ideas in Education	Vol. 4(1). 171-174. 2018	2395-4396	https://ijariie.com/PastIssueSelected.aspx?VolumeId=22	https://ijariie.com/AdminUploadPdf/IN_VITRO_MICROPROPAGATION_OF_MEDICINAL_PLANT_ADENANTHERA_PAVONINA_L_____ijariie7262.pdf	
Phytochemical andAntibacterial	A. A. Maheshwari,	Principal	Int.J.ofSci. Res.InSci.&	Vol. 4(1). 177-181.	2395-	https://ijsrst.com/archive.php?v=4	Journal URL	

Investigation on *Dendrophthoefalcata* (L.f) Ettingshgrowing on *Toonaserrata* (Royle.) Roem.	S.P.Rothe		Tech.	2018	6011	&i=24&pyear=2018	https://ijsrst.com/IJSRST4142	
Qualitative and Quantitative evaluation of *Dendrophthoefalcata* (L.f) Ettingshgrowing on *Chloroxylonswetenia* DC.	A.A. Maheshwari, S.P.Rothe	Principal	Int. J. of CurrentInn. Res.	Vol. 4(1). 990-993. 2018	2395-5775	https://journalijcir.com/international-journal-current-innovation-research	https://journalijcir.com/sites/default/files/issues-pdf/IJCIR-00672-A1-2018.pdf	
Chemoprofile Investigationof *Dendrophthoefalcata*(L.f) Ettingshgrowing on *Boswelliaserrata* Roxb. ex. Coleb.	A.A. Maheshwari, S.P. Rothe	Principal	Int.J.Adv. Res.& Innovative Ideasin Education	Vol. 4(1). 382-390.2018	2395-4396	https://ijariie.com/PastIssueSelected.aspx?VolumeId=22	https://ijariie.com/AdminUploadPdf/Chemoprofile_Investigation_of_Dendrophthoe_falcata__L_f__Ettingsh_growing_on_Boswellia_serrata_Roxb__ex__Cole	

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Micropropagation Studieson *Schleicheraoleosa* (Lour). belongingto Family Sapindaceae FromVidarbha Region.	Deepali Wankhade, S.P.Rothe	Principal	AayushiInt. InterdisciplinaryRes.Jou.	Vol. 5(25).623-625 2018	2349-638x			
Pharmacognostic Investigationof *Argyreiacymosa*(Roxb.) Sweet:AnUnexplored Medicinally Important Liana.	M.N. Bokhad, S.P.Rothe	Principal	AayushiInt. InterdisciplinaryRes.Jou.	Vol. 5(25).762-770 2018	2349-638x			
GC-MS detectionand determinationof chemical constituentsin *Cratevareligiosa*	Nasir Waghay, S.P.Rothe	Principal	AayushiInt. InterdisciplinaryRes.Jou.	Vol. 5(25).838-847	2349-638x			

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The Vegetation ofMornaRiver.	Dr.S.P. Rothe	Principal	Int.J.Adv. Res. &Innovative Ideas in Education	Vol.4 (4). 358-361	2395-4396	https://ijariie.com/PastIssueSelected.aspx?VolumeId=25	https://ijariie.com/AdminUploadPdf/The_Vegetation_of_Morna_River_ijariie8847.pdf	
Phytochemical Investigationsof *Argyreia cymosa* (Roxb.)Sweet: AnUnexplored Medicinally Important Lianas	Dr.S.P. Rothe	Principal	Bioscience Discovery	April 2018	ISSN:2229-3469			
Harmonizing Emotional Intelligence through Meditation: An Ethical and Social Responsibility	Dr.Smita Shingrup	BBA	International Journal of Scientific Research in Computer Science, Engineering and Information	March 15, 2023, PageNo. 39-45	ISSN: 2456-3307	**ConferencePapers/ Articles :** **https://ijsrcseit.com/archive.php?v=12&i=63&pyear=2023**	**https://ijsrcseit.com/paper/CSEIT23975.pdf**	UGCJournal No.64718

for 'Making New India'			Technology					
CloudComputing a Sustainable approach- Need ofthehourfor Green Computing , International Journal of Science & Engineering Development Research	Dr.Smita Shingrup	BBA	International Journal of Science & Engineering Development Research	May 2023, Volume 8, Issue 5, Page No. 258-264	ISSN: 2455-2631	**ConferencePapers/ Articles :** **https://ijsrcseit.com/archive.php?v=12&i=63&pyear=2023**	**https://ijsrcseit.com/paper/CSEIT23975.pdf**	UGCJournal No.64718
AGRI- Women Entrepreneurship : Understandinga Journey from Periphery to Centre	Dr.Smita Shingrup	BBA	QuestJournal of Research in Business and Management	Volume -11,Issue-4, andPage No: 179-184	ISSN: 2347-3002	**https://questjournals.org/jrbm/v11-i4.html**	**https://questjournals.org/jrbm/papers/vol11-issue4/1104179184.pdf**	InternationalPeerreviewedand Referred Research Journal **Impactfactor 5.89**
EthicsandSocialResponsibilities	Dr.RakhiJ. Malhi	BBA	International Journal of Scientific	Volume-9, Issue- 7, and Page	**ISSN : 2456-3307**	**ConferencePapers/ Articles :** **https://ijsrcseit.com/archive.php?v=12&i**	JournalURL :https://ijsrcseit.com/CSEIT23976	UGCJournal No.64718 ImpactFactor-

			Researchin Computer Science, Engineering and Information Technology	No:46-49 March 15,2023,		=63&pyear=2023		7.254
ImageProcessing and ModificationforImprovingPerception ofColor-BlindViewers	Ms.KesarS. Gagnani	BCA	International Journal of Scientific Research in Computer Science, Engineering and Information Technology	Volume-9, Issue-7,and Page No: -50-57 March 15, 2023,	ISSN : 2456-3307	**ConferencePapers/ Articles :** https://ijsrcseit.com/archive.php?v=12&i=63&pyear=2023	JournalURL :https://ijsrcseit.com/CSEIT23977	UGCJournal No.64718 ImpactFactor-7.254
EnvironmentProtectionandSustainableIT	Ms. AvaniS.Kulkarni	BCAs	International Journal of Scientific Research in Computer Science, Engineering and Information Technology	Volume-9, Issue- 7, and Page No:58-62 March 15, 2023,	ISSN:2456-3307	**ConferencePapers/ Articles :** https://ijsrcseit.com/archive.php?v=12&i=63&pyear=2023	JournalURL :https://ijsrcseit.com/CSEIT23978	UGCJournal No.64718 ImpactFactor-7.254

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Harmonizing Emotional Intelligence Through Meditation: An Ethical and Social Responsibility For 'Making New India'

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ABSTRACT

Our country is the fastest growing economy in the world, according to the growth ratio our purchasing power parity (PPP) is increasing. This growing economy expecting more active participation from us,this is resultant into increasing competition, expectations and different emotional problems among us. To become a part of the growth and competition wead opted the different life style, food habits, social changes, and demographic changes. According to the various behavioral studies these are the major causes of creating anxieties, stress, various health issues, effect on academic performance and unbalance emotional frustration, which is resultant into increasing suicidal cases in India. According to the record around 40,000 students' committed suicide cases in last five years.

The main challenge is how to fit ourselves according to these changes and how can we stable our emotional intelligence. This research paper will focus on the importance of emotional intelligence in our day to day life, how we can achieve balance emotional intelligence through meditation, how can we reduce stress and how it can be a helpful tool to write a success story of a New India.

Keywords: Emotional Intelligence, Meditation, stress management

1. INTRODUCTION

It is a generally accepted scientific theory that human beings are social animals and are empowered with intellectual capabilities, which is constantly influencing them to better their ways of living. This means that every person has to function within the norms set by society in general, and his immediate circle in particular. While functioning within these boundaries he/she has to fulfill his/her aspirations along with the activity of earning his/her lively hood. Therefore over long years of civilization, we have developed a very complex structure of society, which is fragmented in many ways. Depending upon the parameters of culture, profession, caste, creed, religion etc. Similarly a business executive has to meet his/her career aspirations, company commitments, family obligations and social expectations. Women haveto meet the job commitments, stringent family commitments, and social bindings. As the world moves on the population grows, trying to get their share of the limited resources. This is compounded by the growing aspirations of individuals, groups, states, countries, being Influenced by technology, mass media, and so on. The direct result is an increased state of

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IJSRCSEIT Team wishes all the best for bright future

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Cloud Computing a Sustainable approach- Need of the hour for Green Computing.

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Abstract- **The inception of the industrial revolution accelerated the exploitation of fossil-fuels and there by unknowingly polluting the atmosphere leading to higher carbon foot print and water foot print. It took quite a long time to realize the damage that is being done. It is our duty today to look upon environment friendly approaches for our sustainable future Invention, Innovation and Adaptation of green technologies is the need of the hour. With ever increasing usage of IT infrastructure around the globe, the increase in energy consumption and carbon emission is a worrisome situation for everyone because of its direct effect on environment. The environment is being dangerously impacted by Information Technology infrastructure's, extensive use and its waste. Cloud computing has emerged as one step further solution to deploy all virtualized IT resources as per need on self-service basis as a rental method for the users. This paper analyses about the various e waste produced and how cloud computing can be used for the reduction of hardware and ensure the safety of environment.**

Keywords- **Cloud computing, carbon emission, energy consumption, IT waste, virtualization.**

1. INTRODUCTION

E waste management is one of the main issues faced by the IT industry. E waste management consists of both less production of e waste and the recycling of the produced ones. Accumulation of e- waste can lead to resource shortage and environmental pollution. Moreover it also makes sustainable development hard and the idea of greener IT industry impossible. The recycling of e waste also helps in lowering the cost of manufacture of products. Along with the current methods for recycling of the e waste produced, the rising trend of cloud computing can be used for e waste management. Cloud computing can help companies reduce their e-waste in several ways.

- First- companies no longer have to purchase, repair, or replace hardware for an on-site IT infrastructure when they sign up for cloud-based solutions. They will not have to dispose of all of their obsolete or broken servers, storage devices, networking hardware, and cables every year.
- Second- cloud hosting companies utilize hardware more efficiently. They can host multiple applications and infrastructures per server. As a result, cloud hosting providers purchase relatively small amounts of hardware and fully utilize their servers, storage devices, and networking hardware before disposing of them.
- Third-companies that adopt cloud-based solutions do not have to frequently repair or replace their end-user hardware such as desktops, laptops, keyboards, mouse, and monitors. The servers of the hosting company will take care of the majority of the processing and storage. Old devices will perform as well as brand-new hardware with cloud-based solutions. Businesses may not even have to purchase any new hardware; employees can also access cloud-hosted applications and infrastructures from their personal laptops, tablets, and smartphones. Unlike other revolutionary technologies, cloud computing does not require people to get rid of their old devices. Instead, the cloud revitalizes older computers and infrastructure hardware.

2. BASIC CONCEPTS

2.1. Electronic Waste

The e waste contains many lethal elements like lead & cadmium such as in cadmium batteries, cathode ray tubes with lead oxide & barium, brominated flame retardants which are used on printed circuit boards, cables and plastic casing, poly vinyl chloride (PVC) coated copper cables and plastic computer casings that discharge highly toxic dioxins& furans when burnt to obtain valuable metals. Mercury in flat screens, mercury switches, poly chlorinated biphenyl's (PCB's) present in older transformers, capacitors etc, also contribute to e waste production. The current method to reduce environmental hazard is hardware recycling which is based on the e- waste collection, dismantling and recovery of valuable components manually and final processing for metal recovery through various metallurgical process. This can help in the management of e-waste to certain extend but does not solve the problem of e waste completely. E-waste consists of more than 92% retrievable and reusable components, of which some are exceedingly precious and limited. Approximately, 50 million tons of e waste consists of 15 million tons of steel, 4 million tons of aluminum, 6 million tons of copper over & above glass, plastic, silver, gold, palladium, platinum, iridium etc. Because of high recycling costs in developed nations, 80% of e-scrap goes in land fill, in spite of being so resource rich[1]. And, the developing nations regrettably do not deploy environment friendly practices. As a result, both the sets of countries are equally spoiling the environment and creating environmental pollution. Computers contains lots of useful parts and modules that can be recycled, reused and re-purposed, that it's

1 Minimizing Electronic Waste using Infrastructure as a Service by Blessy Mathew, *International Journal of Computer Applications® (IJCA) International Conference on Emerging Technology Trends (ICETT) 2011* 7

CloudComputingaSustainableapproach-NeedofthehourforGreenComputing,InternationalJournalof Science & Engineering Development Research -Dr. Smita Shingrup

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Research Paper

AGRI-Woman Entrepreneurship: Understanding a Journey from Periphery to Centre

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Smt. Maherbanu College of Science & Commerce, Akola

Abstract:- *Rural female's participation and contribution in the development of the rural sector have been one of the most neglected and discriminate assessed area of the study. Various efforts have been made and studies have been done so par on the diversified growing participation of urban females in development activities of different sector. But active involvement of rural as well as non-rural sector has been overlooked by passed, under estimated.The journey of a woman in agricultural sector is very long from a supporting role to centre role, howeverthis journey not ended. The role of women in agribusiness is now a days creating her individual identity as an entrepreneur and increasing the opportunities for entrepreneurship.*

Keywords: Agriculture sector, Rural Sector, Agribusiness, Entrepreneurship

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Role of women: Rural Scenario: -

Women are parts of labor force. She produces not merely goods and services but is a prime source of accelerating human race. Thus, from the point of view of increasing labor force as well as of involving themselves in production and service activities, their active and positive participation can not be overlooked. But throughout the world the rural women have been under-represented in the development process. Economic contribution implies economically productive participation of physical or mental activity leading to production of goods and services either for consumption or for sale or for exchange. Household activities such as cooking, laundering , rearing children, cattle servicing which do not result in the production of goods or visible income do not obviously and all under the preview of this definition. Since most of rural females in comparison to urban females are engaged in such unproductive and unremuerative activities their economic contribution in terms of production employment and earning have been overlooked and labeled as, 'supplementary' , 'casual', 'optional' and 'supporting'.

Table 1: Number of Workers by Usual Status and Annual Growth during 1983 to 2005.

		Employment (Millions)				Annual Growth Rate (Per Cent)			
		1983	1993-94	1999-2000	2004-05	1983 to 1993-94	1993-94 to 2004-05	1993-94 to 1999-2000	1999-2000 to 2004-05
Rural	Male	153.9	187.8	196.7	219.0	1.91	1.41	0.78	2.17
	Female	90.6	104.7	104.0	124.0	1.34	1.55	-0.11	3.58
	Total	244.4	292.5	300.7	343.1	1.72	1.46	0.47	2.67
Urban	Male	47.2	64.6	77.0	90.4	3.04	3.10	2.98	3.25
	Female	12.2	17.2	19.0	24.0	3.36	3.08	1.65	4.82
	Total	59.4	81.8	96.0	114.4	3.10	3.10	2.70	3.57
Total	Male	201.1	252.4	273.8	309.4	2.19	1.87	1.37	2.48
	Female	102.7	121.9	123.0	148.0	1.64	1.78	0.15	3.78
	Total	303.8	374.3	396.7	457.5	2.01	1.84	0.98	2.89

Note: Economic and Political Weekly, Volume XLII No 3, dated: January 20-26, 2007, titled: Growth of Employment (1993-94 to 2004-05): Illusion of Inclusiveness? By J. Unni and G. Raveendran.

*Corresponding Author: Dr. Smita Shingrup

AGRI-WomenEntrepreneurship:UnderstandingaJourneyfromPeripherytoCentre-Dr. Smita Shingrup

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Ethics and Social Responsibilities

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ABSTRACT

Ethics: a branch of philosophy that involves systematizing defending and recommending concepts of right or wrong. Talking about Social Responsibility; refers to an individual or corporate world to fulfill basic duties and once taken in to action will benefit the society. Students are taught about these basic responsibilities since childhood which they reflect in the society from time to time, whether in school, college, society or corporate world. Students' Ethics are the responsibility that we take for our actions and decisions, raising concerns about anything that is not ethically right or socially acceptable. It also adds to practice integrity by being honest and truthful, acting within law. This also includes Intellectual freedom; We as a part of the society protect freedom of expression and free speech.Further talking about Social Responsibility as a company manager: the manager makes decision to maximize profits and protect the interest of community and society as a whole. Secondly he as a manager provides time for employees to support their own social initiatives can also build pride, loyalty and motivation amongst team members. Talking in wider sense Social Responsibility is defined as operating a business in manner that meets or exceeds the ethical expectations that society has for us.

1. INTRODUCTION

Ethics refers to a set of moral principles that helps to govern an individual or a person. Initially talking about an individual: he/she can be any person from society. It is always a question that when is the correct time for an individual to learn ethics or being a socially responsible person. For me he/she should inculcate it from very beginning of his/her life. This is the responsibility of parents and teachers to work on this part rather than only sticking on hard skills. A personality is truly an impressive personality when he/she has soft within.

Nowadays it's a compulsory to learn Ethics, in fact a trend to understand social responsibility. If we peep into past of a few decades earlier it was inculcated within us since childhood. Our parents and teachers were the major reason behind the Ethical Personality that we are today and are thankful to them for we are socially responsible today. Being a faculty we too are carrying the same legacy and offering the same to our kids; our students. Making this sure that they will definitely be promising personalities in the future, not only as a student but also as a corporate person or a businessman. This begins at home and school.

How can it start from school to higher school?

Teacher can help their students to understand and learn to share and care in the community.

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Image Processing and Modification for Improving Perception of Color-Blind Viewers

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ABSTRACT
About 8% of men and 0.5% women in world are affected by the Colour Vision Deficiency. As we observe the statistics, we can find that there are nearly 200 million colour blind people in the world.CVD affects their ability to effectively executecolor and visualization- related tasks. A colour vision deficient will not be able to attain every critical aspect of information present in the image or video. But with the help of Image processing, many methods have been developed that can modify the image and make it suitable for viewingby the person suffering from CVD. This paper focuses on some of the methods of modifying images such that viewers suffering from deuterenopia are able to better perceive image detail and color dynamics.

Keywords: Deuteranopia, Dichromacy, CVD,LMS Daltonization, RGB ColorConstrasting, LAB Color Correction.

I. INTRODUCTION

In last few decades, multimedia has significantly increasedthe use of colors to convey the information. The Color vision deficient people cannot distinguish the multimedia contents as a normal person can do. As stated by William Woods[1], Color blindness affects roughly ten percent of humans. About ninety-nine percent of this ratio suffer from some sort of red-green deficiency, where a person cannot differentiate efficiently between red and green. Dichromacy is a general term for a person's lack of ability to perceive one of these three wavelengths.

Types of colorblindness:

A. ***Monochromacy*** –If there is no cone or only one type of cone present at retina of eye then it is called Monochromacy. In Monochromacy, person is not able to see any color other than black, white and gray.

ImageProcessingandModificationforImprovingPerceptionofColor-BlindViewers-Ms.KesarGagnani

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Environment Protection and Sustainable IT

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ABSTRACT
Environment is a precious gift given to Human beings, its resources are finite and valuable, but due to increase in technology, we are directly-indirectly destroying environmental resources that are not regenerated easily, but improved technology is also a need of hour. The damage that environment is suffering through the enormous use of IT tools in the form of E-waste, itself find the solution to minimize this valuable loss of nature with the process of "Remanufacturing", i.e., the reuse E-wastage material to prepare new product that are equal to brand newand also to save our Environment.

Keywords: Environment, E-waste, Carbon footprint, Sustainable IT, Circular Computing,

I. INTRODUCTION

An Environment is the blending of various Biotic and Abiotic factors, where biotic factors include all flora and fauna, and abiotic include water, sunlight, land, air, rocks, climate etc. and also Humans are blessed with the huge treasure of metals and minerals.
Technology the word came from Greek tekne(technical, art, skill) and logos (knowledge),it is the set of knowledge, expertise, experience and method through which humans change, transform and use our environment to create tools, machines, products and services that meet our needs and desires,from last few years technology has rapidly increased way of thinking and ease of living, but under the name of technology we Humans are rapidly using and destroying our valuable asset our environment. We exhume large area of land for extracting metals and minerals, we cut huge amount of woodland to obtain wood, Human manufactured chemical compounds changed environment, and many of combustion products that produce carbon-di-oxide in environment. Our routine activities generate lot of wastes that are hazardous to our environment.

II. INFORMATION TECHNOLOGY

It is the use of computer and related device to store and access information as per need. It is the base of our communication, technological advancement, innovation, sustainability and recreation, Productivity, Management. It is the base of workforce of any organization.

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Phytochemical and Antibacterial Investigation on Dendrophthoe Falcata (L.F.) Ettingsh Growing on Toona Serrata (Royle.) Roem.

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[2]Principal, Smt. Meherbano College of Science and Commerce, Akola, Maharashtra, India

ABSTRACT

The present investigation is designed to evaluate phytochemical contents, qualitatively and quantitatively and to study antibacterial activity of Dendrophthoe falcata (L.f.) Ettingsh belonging to family Loranthaceae growing on the host plant Toona serrata (Royle.) Roem. of family Meliaceae. The preliminary phytochemical tests were performed in five different solvents viz. Ethyl acetate, Chloroform, Distilled water, Methanol and Ethanol, which showed the presence of Carbohydrates, proteins, Glycosides, steroids, saponins, alkaloids, flavonoids, phenolics, etc. The ethanolic extract of Dendrophthoe falcata (L.f.) Ettingsh showed strong antibacterial activity against the micro-organisms i.e. S. aureus, E. coli and P. aeruginosa, while the methanolic extract and aqueous extract showed moderate activity.

Keywords: Dendrophthoe falcata (L.f.) Ettingsh, Toona serrata (Royle.) Roem., antibacterial activity, S. aureus, E. coli, P. aeruginosa, alkaloids, flavonoids, phenolics, etc.

I. INTRODUCTION

The genus Dendrophthoe is evergreen, shrubby partial parasitic plant distributed in the tropical and subtropical regions of the world. The whole parasitic plant is used in indigenous system of medicine as cooling, bitter tonic, astringent, aphrodisiac, narcotic, diuretic, pulmonary tuberculosis, asthma, menstrual disorders, swelling wounds, ulcers, renal and vesicle calculi and vilated conditions of kapha and pitta (Nadkarni, 1993). Dendrophthoe falcata belonging to the family Loranthaceae is an angiospermic hemiparasitic plant was most frequently observed on many host plants, comprises of 20 species and about 7 species are found in India. Dendrophthoe falcata is reported to contain biological active substances such as flavonoid, quercetin, kempferol, rutin (Ramchandran et al. 1999) tannins, β-sitosterol

II. MATERIALS AND METHODS

Plant material

The Dendrophthoe falcata leaves and stem was collected from the host Toona serrata (Royle.) Roem. during March- April of 2015 from Melghat forest region of West Vidarbha, Maharashtra, India and were authenticated by Dr. S. P. Rothe, Head, Department of Botany. The herbarium specimens were given voucher number and deposited in the Department of Botany, Shri Shivaji College of Arts, Commerce and Science, Akola, Maharashtra, India.

Preliminary phytochemical screening

All the extracts were subjected to preliminary phytochemical qualitative screening for the presence or absence of various primary and secondary metabolites (Harborne, 1973).

PhytochemicalandAntibacterialInvestigationon *Dendrophthoefalcata*(L.f)Ettingshgrowingon *Toonaserrata*(Royle.)Roem.

A.Maheshwari,S.P. Rothe

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Research Article

QUALITATIVE AND QUANTITATIVE EVALUATION OF *DENDROPHTHOE Falcata* (L.F.) ETTINGSH GROWING ON *Chloroxylon swietenia* DC

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Dendrophthoe falcata, Chloroxylon swietenia, tribals, Melghat Region, Alkaloids, Flavonoids, Phenolics, Saponins, etc

ABSTRACT

Dendrophthoe falcata (L.f.) Ettingsh is an angiospermic hemi-parasite which grows on a number of host species. Also, it has medicinal importance and used in traditional medicine practices by the tribals of the Melghat Region. Present paper deals with the Qualitative and Quantitative study of Dendrophthoe falcata (L.f) Ettingsh, plant parts growing on the host plant Chloroxylon swietenia DC. belonging to Family: Meliaceae which is a common host in this region. Preliminary study revealed the presence of Carbohydrates, Anthraquinone glycosides, Cardiac glycosides, Coumarins, Quinones, Steroids, Alkaloids, Flavonoids, Phenolics, Tannins, Saponins and Terpenoids while quantitative study showed ample presence of Alkaloids, Flavonoids, Phenolics and Saponins in the plant.

INTRODUCTION

Medicinal plants are part of human society to combat diseases, from the dawn of civilization (Krishnaveni and Mirunalini, 2001). Nature has bestowed our country with an enormous number of medicinal plants therefore India has often referred to as the medicinal garden of the world. In the harmony of modern medicine, the components of synthetic drugs or the medicinally accepted plants are evaluated for their efficacy against certain diseases, thus forming a valuable source of therapeutic agents (Hikino, 1991; Lamartimere *et al*., 1998). The important advantages claimed for therapeutic use of medicinal plants in various ailments due to their safety besides being economical, effective and their easy availability (Atal and Kapoor, 1989; Siddiqui, 1993). Dendrophthoe falcata(L.f.) Ettingsh (Family-Loranthaceae) is a large bushy hemi-parasitic shrub with grey bark, branched, leavesthick, opposite, orange-red or scarlet flowers and ovoid – oblong berries (Chan, 2003). Also known as Loranthusfalcatus Linn. f., it is indigenous to India, Srilanka, Thailand, and Australia. The numbers of host reported for this parasite is over 3009 all around the world. About 7 species are found in India. The bark has narcotic properties. It is used in

MATERIALS AND METHODS

Plant material: The Dendrophthoe falcata (L.f.) Ettingsh, leaf and stem were collected from the host Chloroxylon swietenia DC.during March- April of 2016 from Melghat forest region of West Vidarbha, Maharashtra, India and were authenticated by taxonomist, Dr. S. P. Rothe, Head, Department of Botany, Shri Shivaji College of Arts, Commerce and Science, Akola. The herbarium specimens were given voucher number and deposited in the herbarium of Department of Botany, Shri Shivaji College of Arts, Commerce and Science, Akola, Maharashtra, India.

Preliminary Phytochemical Screening

All the extracts were subjected to preliminary phytochemical qualitative screening for the presence or absence of various primary and secondary metabolites in 8 solvents viz., Acetone, Benzene, Chloroform, Distilled water, Ethanol, Ethyl Acetate, Methanol and Petroleum Ether. (Harborne, 1973).

Quantitative Phytochemical Analysis

All plant parts in which preliminary qualitative analysis showed presence of specific groups of secondary metabolites like

Chemoprofile Investigation of *Dendrophthoe falcata* (L.f.) Ettingsh growing on *Boswellia serrata* Roxb. ex. Coleb.

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ABSTRACT

Dendrophthoe falcata (L.f) Ettingsh is an angiospermic hemi-parasite which grows on a number of host species. Also, it has medicinal importance and used in traditional medicine practices by the tribals of the Melghat Region. Present paper deals with the chemo profiling of Dendrophthoe falcata (L.f) Ettingsh, plant parts growing on the host plant Boswellia serrata Roxb. ex. Coleb. belonging to Family: Burseraceae which is a common host in this region. Preliminary study revealed the presence of Carbohydrates, Anthraquinone glycosides, Cardiac glycosides, Coumarins, Quinones, Steroids, Alkaloids, Flavonoids, Phenolics, Tannins, Saponins and Terpenoids while quantitative study showed ample presence of Alkaloids, Flavonoids, Phenolics and Saponins in the plant. Alkaloids, Flavonoids and Phenolics showed prominent spots when separated through Thin layer chromatography and LC-MS analysis confirmed the presence of alkaloids, flavonoids and glycosides.

Keywords: *Dendrophthoe falcata, Boswellia serrata, tribals, Melghat Region, Alkaloids, Flavonoids, Phenolics, Saponins, thin layer chromatography, LC-MS, etc.*

INTRODUCTION:

The genus *Dendrophthoe* is evergreen, shrubby, partial parasites, distributed in the tropical and sub-tropical regions of the old world. The whole parasitic plant *Dendrophthoe falcata* is used in indigenous system of medicine as cooling, bitter, astringent, aphrodisiac, narcotic and diuretic and is also useful in pulmonary tuberculosis, asthma, menstrual disorders, swelling wounds, ulcers, renal and vesicle calculi and vitiated conditions of kapha and pitta. The decoction of *Dendrophthoe falcata* is used by women as antifertility agent. The Dendrophthoe falcata also have anticancer activity (Hikino, 1991). *Dendrophthoe falcata*, belongs to the family Loranthaceae; is a branched angiospermic hemiparasite, most frequently observed on hosts like *Mangifera indica* (Anacardiaceae), *Chloroxylon swietenia* (Meliaceae), *Madhuca longifolia* (Sapotaceae), etc. Barks of *Dendrophthoe falcata* are grey, its leaves are thick, coriaceous, much variable in shape usually opposite, 7.5-18 x 2-10 cm and its flowers are stout, unilateral racemes, often two from an axil pedicel. The flowers are ovate, sub-acute, concave and scarlet or orange in colour. Anthers are linear, equal in length, to the free portion of the filament. Berries of *Dendrophthoe falcata* are 8-13 mm long ovoid oblong, pink, smooth crowned by a cup- shaped calyx (Chopra *et al.*, 1956). The genus *Dendrophthoe* comprises of 20 species and about 7 species are found in India.

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MICROPROPAGATION STUDIES ON *SCHLEICHERA OLEOSA* (LOUR). BELONGING TO FAMILY SAPINDACEAE FROM VIDARBHA REGION.

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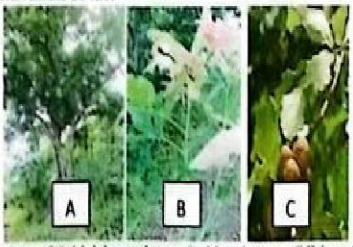
ABSTRACT

Schleichera oleosa (Lour.) belongs to the family Sapindaceae. It is a large deciduous tree. The timber is suitable where hardness, bending strength and toughness are required. It is about 70 percent heavier than teak tree. The wood of this tree is commonly used for oil and sugar mills, cart wheels, and agricultural implements. Oil extracted from the seed of kusum tree, called 'kusum oil', is a valuable component of true Macassar oil used in hairdressing, culinary and lighting purposes and in traditional medicine. At present situation the plant become rare in natural forest therefore micropropagation study is carried out for the conservation of this plant. The Murashinge and skoog's (MS) basal medium with different growth regulators showed best result.

Key words: *MS medium:Murashige & Skoog Medium, 2, 4-D:2, 4-diphenylphenoxyacetic acid, BAP:6-benzylaminopurine,NAA:Napthaleneacetic acid, KN: Kinetin, lit.litre, M :mole.*

INTRODUCTION

Schleichera oleosa (Lour) commonly known as kusum. In local area this plant known as Mokha. Deciduous trees. Flowering and fruiting is from March-June. This tree utilized for multiporposes with both commercial importance and tribal sentiments which is worth conserving. Kundu et,al(2011)Its provides good shade. This plant produce excellent quality lac resin.(Roonwal ML,1962)Different plant parts of Schleichera oleosa (Lour)are used as tribal food, animal feed, seed oil and timber.It is also important source of traditional medicines (Dipnarayan Saha,2012).The plant has been traditionally used for the treatment of pain inflammation, itching, ulcers.(Shrinivas K. et, al.2011).The bark of kusum is often used to control tissue swelling by vaids.(D.Saha et,al,2010),The major used of this tree is for cultivation of lac.



A.Tree of Schleichera oleosa B. New leaves C.Friut of Schleichera oleosa

MATERIAL AND METHODS

controlled condition. Apart from the well-equipped tissue culture laboratory .In the present study, one of the most widely employed Toshio Murashige and Folke Skoog (MS) media (1962) was chosen as a basal media throughout the experiment. The MS medium was supplemented with certain adjuvant like vitamins, auxins and cytokines etc. for initiation of growth, establishment of cultures, maintenance and multiplication of culture and morphogenesis in the explants under aseptic conditions.

The media was prepared in sterile double distilled water by adding desired supplements such as, concentrated stock solutions of macronutrients, micronutrients, iron and organic supplements with various combinations and concentrations of plant growth regulators. Plant Growth Regulators BAP,kinetin and NAA were added after the MS basal media attains room temperature. The Hydrogen ion concentration (pH) of the media was adjusted to 5.8. The Sucrose 30gm was added as carbon source and dissolved properly. Finally 8gm agar was added to the media and volume made upto 1 liter by using double distilled water. The media was then boiled to melt the agar.The medium was then poured in tissue culture autoclaved test tubes. Then test tube containing media was allowed to stand for solidification of media. Contamination was checked after 24 hours.The culture bottles containing MS media are ready for inoculation of explants.

MicropropagationStudieson*Schleicheraoleosa*(Lour).belongingtoFamilySapindaceaeFrom Vidarbha Region.- Deepali Wankhade, S.P. Rothe

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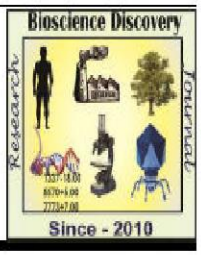

Phytochemical Investigations of *Argyreia cymosa* (Roxb.) Sweet: An Unexplored Medicinally Important Lianas

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Abstract

India is rich in natural resources and medicinal plants which are being used by local healers to treat many diseases. All over the world, traditional herbal treatments are common and have been under constant investigation, to know and exploit the active constituent of these remedies. *Argyreia cymosa* (Roxb.) Sweet, the member of family Convolvulaceae is been found to be used in many traditional medicinal practices by tribal traditional practitioners. Its leaves are used for healing wounds and cracks and also in ethno-veterinary practices to cure corneal opacity of sheep and goat. Present study deals with the phytochemical investigation of medicinally important liana *Argyreia cymosa* (Roxb.) Sweet. The phytochemical analysis showed the presence of significant level of alkaloids, flavonoids, phenolics and other bioactive components which validates its ethnomedicinal importance.

INTRODUCTION

Herbal medicines are being practiced worldwide and are now recognized by World Health Organization (WHO, 2005) as an essential building block for primary healthcare. The plants have been used through the world as a crude drug in

Traditional use of *Argyreia cymosa (Roxb.)* has a long history but lacks adequate scientific documentation, hence the purpose of this study is to find out the extractive value , preliminary as well as quantitative phytochemical analysis and TLC study to find out the number of alkaloid and

The Vegetation of Morna River

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Abstract

Morna is the main water source for of Akola district. It was planned to explore Morna banks for a satisfactory knowledge of our plant resources found in and on the bank of Morna river. The Morna's vegetation is abundant rich in both aquatic as well as terrestrial plant species. During the survey it was found that the vegetation of Morna river comprises of about 11 aquatic plant species and about 296 plant species along the banks. It is obvious that the vegetation of Morna river is quite rich in diversity and abundance.

Key words: *Morna, Akola district, aquatic plant species, vegetation, etc.*

Introduction:

The watershed of Morna lies mostly in eastern Vidarbha region of Maharashtra state. The Morna River basin which is a tributary of Purna River lies towards the northern and southern part of Akola district, and parts of Washim district, forming near about 190 to 200 meters thick lava flows covering an area of 941.39 sq. km. Morna is the main water source for of Akola district. It rises in the southern Barshitakli tehsil Maharashtra state, and flows northward, draining Maharashtra's Vidarbha region before merging with the Purna river.

Akola is one of the district of Maharashtra state of India, situated at the Northern border; between the meridians of longitudes $76^0$51' and $27^0$44' East and between the parallels of latitudes $19^0$51' and $27^0$17' North. Its maximum length from North to South is about 145 km and maximum breadth is about 100 km. Its total area is about 10,606 sq. km. There is a considerable variation in the topography, geology and climate.

It was planned to explore Morna area botanically, for a satisfactory knowledge of our plant resources found in and on the bank of Morna river, as the area of Morna river, is not screened for the floristic survey. In the present investigation, attempts have been made to study the vegetation of this area which has not been reported hitherto. The vast fertile plain of the Morna river, the soil over the entire trap area varies from light reddish sandy loams on the ridges and black cotton soil. Reports and additions of the vegetation of Akola district was reported time to time by Rothe (1997;1999;2004 and 2011).

Materials and Methods:

In the present investigation, the plants from different localities along the river Morna were collected by visiting these localities four times in a year (i.e. June, September, January and April. Collected plant material was cleaned and then dried in blotting papers. Every care was taken to preserve the material in good condition by using insecticide (3% $HgCl_2$). Herbarium sheets for 305 species were prepared. Plants were identified by following the standard flora like that of Hooker (1872-1897); Cooke (1901-1908), Kamble and Pradhan (1988); Sharma et al., (1996); Naik, (1998); Singh and Karthikeyan, (2000) and Singh et al., (2001).

Observations and Results: