

**POLITICAL THOUGHTS AND ACTIVITIES OF MAHATMA GANDHI**

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**ABSTRACT**

Mohandas Karamchand Gandhi was one of the prominent leader of Indian Independence Movement. People called him 'Father of the Nation'. Gurudev Rabindranath Tagore gave him the title 'Mahatma'. He was the first educated barrister who completed his study in London. He belongs from a Pranami Vaishnava family. From earlier time he was inspired by religion. 'Shravana', 'Harishchandra', Ramayana etc, stories, and western philosopher Leo Tolstoy's book 'The Kingdom of God is Within You' and Ruskin's 'Unto This Last' also influenced him and changes his thoughts. After completed his education he went to South Africa, from there Gandhiji started his activities. He took a way of 'Satyagraha' which means accepting the truth, Ahimsha Rules. He established many farm houses, such as Tolstoy farm, Sabarmati Ashram, Sevashram and Finix Farm etc. From Champaran Satyagraha to Kheda, his activities were deeply influenced the masses of rural India. In this Article, I have discussed about the political thoughts and activities of M.K. Gandhi.

**Keywords:** Mahatma, Satyagraha, Father of Nation, Ashram, Vaishnava family.

**INTRODUCTION**

After the end of the Revolt of 1857, Indian people familiar with the British policy. Due to the impact of Renaissance, social reformation movement and western education, middle class educated people understood their position. They started writings, papers, literature. They had to join many sabha and samiti. At that time, all over the India, many reformers were born. In Indian History, all we know him as the 'Father of Nations', M. K. Gandhi is not only an Indian national leader but also the leader of all colonial countries. His contributions was spread in South Africa. Where he started his first political life. It is not possible to describe his ideology and achievement in one article but yet I also try to highlight some basic things and activities of Gandhiji. M. K. Gandhi's full name is Mohandas Karamchand Gandhi, in his family titles was take from their father's name. His father name was Karamchand Gandhi, thats why Mohandas Gandhi took the name of 'Karamchand'. He was born on 2nd October, 1869 in Porbandar, Shri Lal Bahadur Shastri Rashriya Sanskrit Vidyapeetha

# Transient thermoelastic bending analysis of a rectangular plate with a simply supported edge under heat source: Green's function approach

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## Abstract

The aim of the current research is to analyze the transient thermoelastic bending analysis of a rectangular plate with a simply supported edge under the heat source. Initially, the plate is kept at a constant temperature. For  $t > 0$ , the heat is produced in the plate at the rate  $g(W.m^{-3})$  and the surfaces at  $x = 0, a$  and  $y = 0, b$  are kept at zero temperature, while the surfaces  $z = 0, c$  are subjected to heat convection. Using Green's function approach and integral transform technique, the analytical solution of the rectangular plate with the simply supported edge is derived. As a preeminent finding from this investigation, it can be deduced that the accuracy, reliability, and simplicity of these methods are excellent. Accurate bending solutions to title problems are then obtained using the transform technique. The approach used in this paper is more reasonable than conventional methods. Numerical results are presented to demonstrate the validity and efficiency of the approach as compared with those reported in other literature. The outcomes demonstrate that the temperature profile and the thermal deflection are maximum at the middle part of the plate, due to the heat source located in the middle, however, the direction of heat flow and the body deformation is the same.

Keywords: Green's Function, Rectangular plate, Heat Source, Thermal Bending, Thermal Stresses  
2020 MSC: 35B07, 35G30, 35K05, 44A10

## 1 Introduction

The thin rectangular plate is an important structural component that is widely applied in various modern engineering fields, such as aircraft wings, rigid pavements, houses, and bridge decks. Bending analysis of a rectangular plate with mixed boundary conditions has been studied for many years, but most existing methods are appropriate only for particular boundary conditions. This study has changed miraculous attention due to the wide application of the rectangular plate.

Manthana et al. [1, 2] studied the temperature distribution, bending moments and thermal stresses in a functionally graded rectangular plate under unsteady temperature distribution using integral transform method. Manthana et al. [3]

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# Reversible changes in structure and function of photosynthetic apparatus of pea (*Pisum sativum*) leaves under drought stress

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## SUMMARY

The effects of drought on photosynthesis have been extensively studied, whereas those on thylakoid organization are limited. We observed a significant decline in gas exchange parameters of pea (*Pisum sativum*) leaves under progressive drought stress. Chl *a* fluorescence kinetics revealed the reduction of photochemical efficiency of photosystem (PS)II and PSI. The non-photochemical quenching (NPQ) and the levels of PSII subunit PSBS increased. Furthermore, the light-harvesting complexes (LHCs) and some of the PSI and PSII core proteins were disassembled in drought conditions, whereas these complexes were reassociated during recovery. By contrast, the abundance of supercomplexes of PSII-LHCII and PSII dimer were reduced, whereas LHCII monomers increased following the change in the macro-organization of thylakoids. The stacks of thylakoids were loosely arranged in drought-affected plants, which could be attributed to changes in the supercomplexes of thylakoids. Severe drought stress caused a reduction of both LHCI and LHCII and a few reaction center proteins of PSI and PSII, indicating significant disorganization of the photosynthetic machinery. After 7 days of rewatering, plants recovered well, with restored chloroplast thylakoid structure and photosynthetic efficiency. The correlation of structural changes with leaf reactive oxygen species levels indicated that these changes were associated with the production of reactive oxygen species.

**Keywords:** disassembly of LHCII and PSI core, drought stress, non-photochemical quenching, pigment–protein complexes, photosystem, *Pisum sativum*, thylakoid organization.

## INTRODUCTION

Drought stress is a significant environmental constraint that hampers crop yield, particularly in arid and semi-arid regions. There is an urgent need to develop varieties that can grow under limited water conditions without compromising yields. In this direction, it is crucial to understand the physiological, molecular, and photosynthetic responses of crop species under drought. Upon exposure to drought stress, plants displayed various morphological symptoms such as wilting, desiccation of leaves, chlorosis, leaf curling, burning of leaf edges, and necrosis (Seleiman et al., 2021). Parallely, the stomatal conductance decreased to reduce the water evaporation through leaves (Li et al., 2017). Low stomatal conductance decreases intercellular CO<sub>2</sub>, minimizing the supply for photosynthesis (Kelly et al., 2016). As a result, plants water use efficiency (WUE) decreased. Similarly, the leaf relative water content (RWC), an indicator of stress intensity, was also lowered.

The drought-induced imbalance between light capture and its utilization leads to the accumulation of reactive oxygen species (ROS) in the chloroplast and, subsequently, the disorganization of thylakoid membranes (Das & Roychoudhury, 2014). To combat ROS, plants utilize several antioxidant enzymes, such as ascorbate peroxidase (APX), catalase (CAT), and superoxide dismutase (SOD) during drought stress (Thakur & Anand, 2021). The net photosynthetic rate, chlorophyll (Chl) fluorescence, and antioxidant activities were significantly altered under water deficit conditions (Iqbal et al., 2019). The fast Chl *a* fluorescence is an efficient parameter to monitor the photosystem (PS)II and PSI photochemistry (Sánchez-Reinoso et al., 2019; Sipka et al., 2021). However, drought stress can limit the availability of water molecules for the photolysis of water, affecting the efficiency of the PSII oxygen-evolving complex (OEC), particularly D1 activity of PSII (Sasi et al., 2018).

## (II)

# Two new records of Grasses for Maharashtra, India

While exploring the grass diversity of Nagpur division of Maharashtra, one of authors (ST) collected grass specimens from Butibori and Gadhavi riverbank, on critical study were identified as *Eragrostis zeylanica* Nees et Mey. and *Saccharum griffithii* Munro ex Boiss. by following available literature (Nees and Meyen, 1841; Hooker, 1897; Bor, 1940; Bor, 1960; Sreekumar and Nair, 1991). The perusal of relevant literature revealed that these two grasses were not reported from Maharashtra State (Hooker, 1897; Cooke, 1908; Blatter and McSann, 1935; Bor, 1960; Potdar *et al.*, 2012; Kellogg *et al.*, 2020) and hence reported here as a new addition to the grasses of Maharashtra. Detailed description and photo plates are provided to facilitate easy identification. Voucher specimens are deposited at the herbarium of the Department of Botany, Shivaji University, Kolhapur (SUK).

### Systematic Treatment

***Eragrostis zeylanica*** Nees, C.G.D. Nees von Esenbeck, Gramineae: 72: 1841; Bor, Fl. Assam 5: 102. 1940; Bor, Grass. Bur. Cey. Ind. Pak. 515. 1960; Karth., S.K. Jain, M.P. Nair and Sanjappa, Fl. Ind. Enum. Monocot. 218. 1989; Nair and Ramach., Bull. Bot. Surv. Ind. 22: 193. 1980 (1982). Sreek. and V.J. Nair, Fl. Kerala Grass. 394. 1991; S. Moulik, Grass. Bam. India 2: 611. 1997. *E. elongata* sensu Stapf, Hook. f., Fl. Brit. India 7: 319. 1897, non Jacq. 1813 (Fig. 1).

**Type:** SRI LANKA, July 1829, *Macrae* J. s.n. in Herb. Lindley, Herb. Arnott (holo CGE, picture K; iso BM [BM000959507, image!]).

Densely tufted perennials. Culms, 5 – 35 cm high, sub-erect or prostrate from geniculate base; nodes glabrous, brownish; internodes ca. 4 cm long. Leaf sheaths 2–6 cm long, keeled, involute, ciliate towards collar. Leaf Blade linear-lanceolate, 4 – 8 × 0.2 – 0.3 cm, rounded at base, narrow, erect, flat or rolled, often rigid, adaxially hirsute towards the base, attenuate to a fine point; sheaths striate, ca. 2 cm long, smooth, throat bearded, without auricles. Ligules fimbriate, thin, membranous. Panicles oblong or ovate-oblong, upto 15 cm long, spreading, sometime contracted; central axis slender, straight, glabrous, smooth or slightly scabulose

on angle; branches solitary, 0.5–1 mm long, simple or branched, scabulose. Spikelets very shortly pedicelled, crowded, oblong to lanceolate, 2 – 3 (-4) mm wide, sharply acute, 15 – 30 (-40)-flowered greyish or dark-brown; rachis somewhat robust, rigid, smooth, persistent. Lower glume lanceolate, 1 – 1.5 × 0.3 – 0.5 mm, chartaceous, keeled, 1-nerved, acuminate at apex. Upper glume ovate-lanceolate, 1 – 1.3 × ca. 0.5 mm, coriaceous, keeled, 3-nerved, acuminate at apex. Lemmas ovate-lanceolate, 1.5 – 2.5 × 1 – 1.5 mm, coriaceous to chartaceous with hyaline margins, keeled, 3-nerved, subacute to acuminate at apex. Paleas elliptic-oblong, slightly curved, 1 – 1.5 × 0.5 – 1 mm, scabrid, persistent, 2-keeled, 2-nerved, ciliate along the keels. Rachilla wavy, c. 0.5 mm long, glabrous. Lodicules 2, c. 0.2 mm long, obovate. Stamens c. 0.25 mm long, anthers 3. Caryopsis c. 5 × 4.5 mm, ovoid to globular or sub-globular, terete to laterally compressed, light brown

**Flowering and Fruiting:** September – January

**Occurrence:** Rare along stream banks and marshy places.

**Distribution:** India [Andaman Is., Assam, Kerala, Karnataka, Meghalaya, Nagaland and Maharashtra (Nagpur)], Australia, China, Myanmar, Taiwan and Sri Lanka.

**Specimen Examined:** Maharashtra: Nagpur district, Butibori (20°54'49.9"N 78°59'58.9"E), 258m. 25<sup>th</sup> September 2020, *Swati Tathod* SST905 (SUK).

**Note:** *Eragrostis zeylanica* often confused with *E. cumingii* and *E. brownii* but can be identified with its short spreading habit, less fascicled spikelets and short pedicel

***Saccharum griffithii*** Munro ex Boiss., Fl. Orient. (Boisser) 5: 453. 1884; Blatt and McCann, The Bombay Grass. 49: 1935; Bor, Grass. Bur. Cey. Ind. Pak. 211. 1960. *Erianthus griffithii* Hook. f., Fl. Brit. India 7: 122. 1897 (Fig. 2).

**Type:** AFGHANISTAN: Kuram District, on the arid shingle plains and borders of fields, upto 6000 ft. "Hab. ad Schah Bilawul Afghaniae"; *Griffi* exs. 507.

## BIOCHEMICAL CHARACTERIZATION AND SECONDARY METABOLITE PROFILING OF BLACK CHERRY HEIRLOOM TOMATOES

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### ABSTRACT

Tomato (*Solanum lycopersicon L.*) is an important vegetable crop with numerous uses with a high nutritional value as dietary carotenoids serve as a precursor for vitamin A and prevent several chronic-degenerative diseases. Carotenoid profiling is necessary to understand its importance on human health. In tomatoes, carotenoids are important concerning major breeding traits such as fruit color and human health. In our study, we have selected black cherry and black pear heirloom tomatoes and Arka vikas as control. To investigate these heirloom lines, we have studied the biochemical parameter of these heirloom lines and secondary metabolite profiling of the lines. As tomato is a climacteric fruit, we have estimated ethylene content, and levels of chlorophyll by GC- and carotenoid intermediates by HPLC. In the ripening stage of Black Cherry and black pear phytofluene level is completely absent and the lycopene level is 3-fold less in comparison to Arka Vikas. The major carotenoids like phytoene content in ripen stage of Black cherry are completely absent and in the case of Black pear are low.

**Keywords:** Black Cherry, Carotenoid, Primary metabolites, Arkavikas (AV), Black cherry (BC), Black Pear (BP)

### 1. Introduction

Fruit and vegetables are of great importance in the human diet, providing the major source of bioactive substances. Among these, tomato (*Solanum lycopersicum*) stands out for its commercial and nutritional properties. Tomato consumption, as processed products or fresh fruit, is higher than that of all other fruits and vegetables due to their year-round availability and accessible prices. Tomato consumption has been related to a reduced likelihood of several chronic diseases, including cardiovascular disease (Wu et al., 2007) and certain cancers (Giovannucci, 1999), and age-related macular degeneration (Seddon & Kiew, 1996). These health benefits have been widely attributed to their key antioxidants such as carotenoids, vitamins, and phenolic compounds (Gómez-Romero et al., 2017). Therefore, the study of tomato fruit development, carotenoid biosynthesis pathway, and fruit ripening processes gain much importance, which is useful in tomato crop improvement. Ripening of fruit is a complex and genetically programmed process. Ethylene a gaseous phytohormone plays an important role in fruit ripening and also in plant growth and development. Ethylene can

alter plant physiology and morphology due to its effect on regulating gene expression (Moctezuma et al., 2003). Such regulation depends on the normal ability of the plant tissues to perceive ethylene and initiate signal transduction. Carotenoids comprise a large group of ubiquitous pigments. In plants carotenoids play indispensable roles in light harvesting and as precursors of the plant hormone abscisic acid (Meléndez-Martínez et al., 2022) They are produced via the general isoprenoid biosynthetic pathway in chloroplasts of photosynthetic tissues and the chromoplasts of fruits and flowers. Tomato is an important model for studying the regulation of carotenoid biosynthesis during fruit ripening (Stanley & Yuan, 2019). The red colour of tomato fruits results from the accumulation of lycopene which constitutes the major portion of the chromoplast carotenoid pool. Therefore, a study of carotenoid contains give an overview of the ripening processes of fruits.

In the present study, we perform biochemical analysis and estimated ethylene content in the red ripe stage to validate the role of ethylene in the fruit ripening process. We also estimate the important carotenoid that plays an essential role in fruit ripening and gives an insight into it.

**SYNTHESIS, SPECTRAL CHARACTERIZATION AND ANTIMICROBIAL STUDY OF  
SOME NEWLY SYNTHESIZED RESORCINOL INCORPORATED AZO DYES**Swapnil D. Bhagat<sup>1\*</sup>, Sopan D. Ingole<sup>1</sup>, Nandkishor S. Thakare<sup>1</sup> and Pankaj S. Chaudhari<sup>1</sup>Department of Chemistry, M.S.P. Arts, Science & K.P.T. Commerce College, Manora, Maharashtra, India.<sup>2</sup>Department of Chemistry, Shri. V. R. College Sawana, Tq. Mahagaron, Dist. Yavatmal, Maharashtra, India.**\*Corresponding Author: Swapnil D. Bhagat**

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**ABSTRACT**

In this work, four azo dyes were synthesized by the diazotization process of four aromatic amines using  $\text{NaNO}_2$  and  $\text{HCl}$ , and coupling of these diazonium salts with Resorcinol. The synthesis of azo dyes has been confirmed by FT-IR and  $^1\text{H}$  NMR spectral data, and their antimicrobial activities have been tested using the disk diffusion method against four different bacteria. These newly synthesized azo dyes are found to have good antimicrobial activity and synthesized in good yield.

**KEYWORDS:** Azo dyes, Resorcinol, antimicrobial activity.**INTRODUCTION**

Azo groups are of great interest because of a wide range of applications. Azo dyes are in use as dyestuffs for wool, leather and synthetic fabrics due to their excellent coloring properties.<sup>[1]</sup> Compounds containing azo groups are also important structures in medicinal and pharmaceutical chemistry and it has been suggested that the azomethine linkage might be responsible for the biological activities displayed by Schiff bases.<sup>[2]</sup> These compounds have also received special attention in coordination chemistry due to their mixed hard-soft donor character and versatile coordination behavior.<sup>[3,4,5]</sup>

Dyes synthesized from heterocyclic amines produce pronounced bathochromic effect, when compared to the corresponding aniline compounds.<sup>[6]</sup> Azo dyes based on heterocyclic amines have been studied widely due to their excellent thermal<sup>[7]</sup>, optical<sup>[8]</sup> and medicinal properties, such as antibacterial<sup>[9,10,4,11]</sup>, antiviral<sup>[12]</sup>, antifungal<sup>[13]</sup> and antioxidant activities.<sup>[14]</sup>

Recently, the study of azo dyes containing hydroxyl groups has attracted considerable attention.<sup>[15,16,17,18,19]</sup> Inter- and intramolecular proton transfer from phenolic oxygen to imine nitrogen is very common in polyhydroxy derivatives of azo dyes resulting in a self-isomerisation. Due to proton transfer ability of azo dyes, these systems have been of a special interest from practical viewpoint as the tautomers showing different optical behavior and dyeing properties.

In the present study, Resorcinol is coupled with diazonium salt of eight aromatic amines VIZ: Aniline, o-Nitro aniline, p-Toluedine,  $\alpha$ -Naphthylamine,

Sulphanilic acid, m-Nitro aniline, Benzedine and Anthranilic acid.

**METHODS AND MATERIALS**

All the chemicals used in these experiments were of analytical grade. All the melting points were determined by the open capillary method and are uncorrected. The products were confirmed by  $^1\text{H}$  NMR (Burker average II 400 NMR Spectrometer) and IR technique (Shimadzu). The biological activity was evaluated against two kinds of bacteria gram-positive and gram-negative. The products were recrystallized by ethanol as a solvent.

**General procedure for synthesis of azo compounds<sup>[20]</sup>**

Substituted aromatic amines (0.01mole) were mixed with 2.5 ml conc.  $\text{HCl}$  and 2.5 ml (4N) cold solution of  $\text{NaNO}_2$  was added with the stirring. The temperature of the reaction was maintained up to  $0-5^\circ\text{C}$ . Diazonium salt solution prepared above was added drop wise to the alkaline solution of Resorcinol. The reaction mixture stirred for 10 – 20 minutes maintaining the temperature  $5-10^\circ\text{C}$ . The colored product so obtained is filtered washed with water and recrystallized from 80% ethanol. The general Scheme for the synthesis of azo dyes of Resorcinol is shown in figure (I).

# The Role of ICT (Information and Communication Technology) In Higher Education

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## ABSTRACT

The planning and execution of education must be improved in order to meet the goals set for each age group. A modest growth trend in total representation is reflected in India's higher education. The NPE-2019 declares a favourable long-term policy. It is about providing a large-scale facility and access to educational needs, as well as the total integration of physical and biological educational resources with technology. It would be possible to produce the most amount of higher education with greater values if the teacher, students, curriculum, extracurricular activities, teaching aids, facilitators, evaluations, assessments, virtual utility, etc. were all integrated. The agencies and organisations involved in the direction, supervision, and management of higher education keep a close eye on the programmes, and education technology will give the organisation a timely and ideal functionalism for developing new policies. The government's aim and vision for education are made possible through both private and public initiatives. The actual preservation and analysis of data for educational purposes is guaranteed by educational technology. The electrification of higher education and its use of technology and communication have a positive impact on student interest and performance.

**Keywords:-** Technology, Higher Education, Challenges

## I. INTRODUCTION

The Diploma, Graduation, Post-Graduation, Doctoral, Post-Doctoral, and Fellowship educational programmes are offered to applicants to enrol under colleges, institutions, universities, and research centres in order to enhance their knowledge for practical application. In India, many public and private institutes of higher learning have been established. The main goal of educational institutions is to impart knowledge as effectively as possible through the efficient use of its input resources, which include lecturers, classrooms, libraries, and laboratories. Every programme has a different aim, but the most typical one is to equip the participants with knowledge for future learning or professional competencies.

Social well-being is a component of sustainable development, and it depends on education. Reforms in education are primarily motivated by the emergence of information technology as a tool for the dissemination of knowledge. Education in schools and institutions has changed as a result of the introduction of new technology-assisted learning tools like mobile devices, smart boards, MOOCs, tablets, laptops, simulations, dynamic visualisations, and virtual laboratories. One of the most economical strategies for training developing

**EVALUATION OF SOME PESTICIDE RESIDUES IN SURFACE WATER OF RIVER AASNA PASADGAON, NANDED****<sup>1</sup>S.D. Ingole and <sup>2</sup>R.N Ingole**<sup>1</sup>Department of Chemistry M.S.P. Arts, Science & K.P.T. Commerce College, Manora<sup>2</sup>Department of Chemistry Shri Vitthal Rukhmini Art's, Com. & Science College Sawana**ABSTRACT**

In existing study to determine the levels of selected pesticides in surface waters was carried out in two seasons and three pre-determined sites. A higher concentration of DDT was observed in all stations and matrixes, while Heptachlor was least observed. In the existing study an efforts has been made to evaluate and determine the pesticide residue of five pesticides DDT, DDE, Endosulfan, Chlorodane and Heptachlor in surface water was carried out in two season by using High Performance Liquid Chromatography (HPLC). It was observed that DDT, DDE, Lindane, and Heptachlor was the predominant residues in all the sample. The level of Heptachlor and chlorodane was very low.

**Keywords:** DDT, DDE, Endosulfan, Chlordane and Heptachlor pesticides, HPLC, Veni.

**Introduction**

Pesticides have become the part and parcel of modern day agriculture. The absence of pesticides will jeopardize the health of plants, animals and humans. Pesticides are not only an agricultural commodity but find use in non-agricultural regions. But the very nature of the pesticides to kill renders them harmful for the humans and other living beings. Rapid population growth coupled with urban and costal development in many parts of the world has generated global concern. There is the fear that anthropological population would reduce biodiversity and productivity of food resources. Studies have shown that human population that consumes large amount of aquatic food has higher levels of persistent Organic Pollutants (POPs) such as Polychlorinated Biphenyls (PCBs) and some heavy metals.

The toxicity of pesticides to target and non-target organisms generally depends on the amount present in the environment, the proportion available to the biota and ultimately in the amount actually encountered and absorbed by the organism [1].

Pesticides use has increased worldwide, particularly in its use to salvage the food supply to the ever increasing global population. Although it is undisputed that pesticides are essential in modern agriculture. There is growing concern about possible environmental contamination from agrochemicals, industries and household and rain water runoff from agricultural system, disposal of outdated

stocks, containers and pockets and discharge of waste from industries [2]. These Compounds when discharge into the aquatic system plays an important role in contaminating such systems. Atmospheric transport also represents an important source of pesticides residue accumulation in water bodies [3]. It has been reorganized that the persistent and bioaccumulation tendency of these substances, their metabolites and residues in the environment make them not only remain where they are applied but instead partition between the major environmental compartments in accordance with their physic-chemical properties and may thereby become transported several kilometers from the point of their original release[4]. Such environmental distribution may lead to exposure of living organisms including man that are far removed from intended targets. Researchers have detected pesticides residues in heptachlor, endosulfane, Aldine, DDT and PCBs. Many of these pesticides have also been detected in sediment, aquatic plants and fish [5].

**Material and Methods**

Water samples were taken from 0.3 m below the surface with a pre-cleaned glass bottle. For sampling turbulent midstream position of water bodies were chosen to approximate mean concentration of river water. All foreign bodies were removed and the samples were stored in ice during transport and were kept at 4<sup>0</sup> C in the laboratory until the solid phase extraction.





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BY INDIGENOUS FOLKLORE OF MAHUR TALUKA OF NANDED  
DISTRICT, MAHARASHTRA"**

  
Dr. K.D. Bompilwar  
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Dr. M.B. Kadam  
Principal

## ETHNO-MEDICINAL PLANTS USED IN TREATMENT OF JAUNDICE BY INDIGENOUS FOLKLORE OF MAHUR TALUKA OF NANDED DISTRICT, MAHARASHTRA

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### ABSTRACT

Since ages, herbs are being used for treating different ailments in different parts of world by different communities. The present ethno-botanical explorations conducted in forest areas of Mahur taluka resulted in the information on the plants used in treating many diseases. The most prevalent disease found in the area was jaundice. For which about 08 plants species belonging to 08 Angiospermic families are used.

Information gathered from Mahur Taluka of Nanded district indicates that the tribals, and other village people of this region possess good knowledge of plants in treating different ailments, but their continuous and progressive exposure to modernization may result in extinction of the such rich heritage of knowledge in the course of time. Majority of preparation are from leaves. Following communication includes the remedies against jaundice with the details like method of preparation of medicine and its application. Among the plant parts used in different formulations, leaves are abundantly used which is followed by stem and roots.

**Keywords:** Ethno-medicinal plants, Jaundice, Mahur.

### 1. Introduction

Mahur taluka is located in northern part of Nanded district. It is bounded North by Yavatmal district, South by Kinwat taluka of Nanded district East part by Adilabad district of Telangana and West by Pusad taluka of Yavatmal district of Vidarb region. Geographically the Mahur taluka is situated between 19<sup>o</sup>49' to 19<sup>o</sup>83' North latitude and 77<sup>o</sup> 91' to 77<sup>o</sup>55' East longitude. The total geographical area of taluka is 52,160 hectares of which 14397.39 hectares area covered with forest and 37762.61 hectares are non-forested area and its population is 86782 (Census-2001), out of this 15.5 percent is inhabited by tribal population of aborigines like Andh, Kolam, Gond, Naikede and Pradhan. Mahur taluka is a thick forested area of Nanded District. The main river is Penganga which flows from the South to North direction.

### 2. Materials and methods

For documentation of ethno-botanical information and collection of plant material, several tours were undertaken during the period from 2019 to 2021. Data presented here is based on personal observations and interviews

with traditional healers (Viz. Medicine men, Hakims and old aged people) and the methodology used is based on the methods available in the literature 7, 11. Ethnobotanical information about medicinal plants was documented in data sheets. For collection of plant material, local informer accompanied to authors. Plant identification was done by using regional floras and flora of adjoining districts 6, 15. Plants used were compared with major published literature 1-5, 8-10, 12-14 and 16. Uses which are not mentioned in the literature are considered as uses less known in India and are marked by asterisks(\*) in the present paper.

### 3. Enumeration

The present ethno-botanical explorations conducted in forest areas of Mahur taluka of Nanded District, resulted in the traditional plant uses of 08 plants species belonging to 08 families. Following data includes botanical name of species, vernacular name, family, plant part used, method of preparation of medicine.



## Indigenous Herbal Health Traditions of Gond Community in Gadchiroli District (M. S.)

Swati Tathod

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### ABSTRACT

Densities and viscosities of the binary mixtures of propionaldehyde with methanol, ethanol n-propanol and n-butanol at 298.15, 308. been determined by using experimental data. Viscosity deviations, excess molar volumes and excess free energies of activation of viscous flow have been calculated and correlated with Redlich-Kister polynomial equation.

**Keywords:** Density, Viscosity, Viscosity deviation, Excess molar volume, Binary system, propionaldehyde.

### I. INTRODUCTION

Traditional remedies are used by around 85 percent of India's rural population and 80 percent of the world's rural population to cure various diseases (Sandhya et. al., 2006). In India, the traditional systems of Unani, Ayurveda, Homeopathy, and Siddha account for over 95% of prescriptions (Satyavati et. al., 1987). However, urbanization and acculturation, tribal environment customs, and their faith and belief are all rapidly altering in a negative direction. Because of uncontrolled forest exploitation and destruction, the spread of dangerous chemicals, the introduction of alien species, and overexploitation of natural resources, a number of taxa have already vanished, and others are on the verge of doing so, even before humans were aware of their existence. It's crucial to remember this.

### II. STUDY AREA

In the Deccan plateau, the Gadchiroli district of Maharashtra is located between 180 40' and 200 50' north latitude and 790 45' to 800 55' east longitude. It has a total area of 15,434 square kilometres. The states of Chhattisgarh and Andhra Pradesh encircle it. The district, which is surrounded by hills and forests, is classified as a tribal region. Gadchiroli's natural vegetation contains a diverse range of economically and medicinally important plant species. It is well-known for its bamboo and tendu leaves. One of Gadchiroli's tribe communities, the Gond, has evolved a unique herbal health system based on traditional ethnic knowledge regarding the efficacy of the bulk of these plant species.

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# ON SOME EXISTENCE AND UNIQUENESS RESULTS FOR NONLINEAR FRACTIONAL DIFFERENTIAL EQUATIONS WITH BOUNDARY CONDITIONS

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*Abstract.* In this paper we have discussed a boundary value problem involving Caputo nonlinear fractional integro-differential equations of order  $0 < \alpha \leq 1$  and  $0 < \beta \leq 1$  with boundary conditions of the form  $x(0) = x(1) = 0$ . We have proved some new existence and uniqueness results by using the fixed point theory. In particular, we have used the Banach contraction mapping principle and Krasnoselskii's fixed point theorem under some weak conditions. The results proved are supported by means of a couple of examples. *Keywords:* Riemann-Liouville fractional derivative, Caputo fractional differential equation, Banach contraction principle, Krasnoselskii's fixed point theorem

MSC2020-Mathematics Subject Classification: 34B15

## 1. INTRODUCTION:

After the wide and successful applicability of the theory of differential equations in the fields of Applied Mathematics, Mathematical Physics, Chemical Sciences, Biological Sciences, Engineering and Technology, etc., the theory of fractional calculus has attracted the attention of many researchers because of the applicability of the derivatives and integrals of the fractional order with the corresponding initial and boundary conditions. Besides all the fields of sciences and technology as mentioned earlier, the theory of fractional calculus is being applied to Fluid Dynamics, Electromagnetism, Viscoelasticity, the Analysis of the Feedback Amplifiers and Capacitors, etc. In last few decades, many of the researchers have pointed out that the fractional order differentials and integrals are of special importance in order to describe the viscoelastic properties of the real materials like polymers. In this paper, we have considered the existence and uniqueness of solutions for the following problem:

$$D^\alpha D^\beta x(t) = f(t, x(t), \phi x(t), \psi x(t)), t \in [0, 1] \dots (1)$$

$$x(0) = x(1) = 0$$

where  $0 < \alpha \leq 1, 0 < \beta \leq 1, D^\alpha, D^\beta$ , are the Caputo fractional derivatives of order  $\alpha, \beta$ ,

$f : [0, 1] \times R^3 \rightarrow R$  is a continuous function, and

$$\phi x(t) = \int_0^t \lambda(t, s)x(s)ds \dots (2)$$

$$\psi x(t) = \int_0^t \delta(t, s)x(s)ds \dots (3)$$

where  $\lambda, \delta: [0, 1] \times [0, 1] \rightarrow [0, +\infty)$  with

$$\phi^* = \text{Sup}_{t \in [0, 1]} \left| \int_0^t \lambda(t, s)ds \right| < \infty \dots (4)$$

$$\psi^* = \text{Sup}_{t \in [0, 1]} \left| \int_0^t \delta(t, s)ds \right| < \infty \dots (5)$$

Before proving the existence of the solution to the boundary value problem (1–5), we will take a review of the basic definitions and the notions required for the understanding of these results in the next section.

## 2. A REVIEW OF PRELIMINARY CONCEPTS AND RESULTS

Leibnitz discussed the fractional derivative of order 1.5 in his notes to L'Hospital back in the year 1695. Joseph Fourier in 1822 gave an expression for a fractional order derivative [1] obtained from the Fourier integral representation of a function in the form

$$\frac{d^u[f(x)]}{dx^u} = \frac{1}{2\pi} \int_{-\infty}^{\infty} f(\alpha) d\alpha \int_{-\infty}^{\infty} p^u \cos[p(x-a) + \frac{u\pi}{2}] dp$$

The first major study of fractional calculus was made by Liouville in 1833 who gave two definitions of fractional order derivatives as follows. The arbitrary derivative  $D^\nu$  of order  $\nu$  of a function  $f(x)$  having power series expansion

## HAZARDS EFFECT OF E-WASTE ON THE ENVIRONMENT AND HUMAN HEALTH IN INDIA AND E-WASTE MANAGEMENT

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### ABSTRACT

*E-waste consist of scrap of electronic appliances such as computers, mobiles and telephones, radio, speakers etc. Major producers of e-wastes are China, USA and India. According to Global E-waste statistics 57.4 million Metric tones E-waste is generated in 2021. According to the UN, in 2021 each person on the planet will produce an average 7.6 kg of e-waste. Toxic components in electronic waste, such as mercury, lead, cadmium, polybrominated flame retardants, barium, and lithium, are hazardous to human health. E-waste is toxic, non-biodegradable, and accumulates in the environment, including soil, air, water, and living organisms. Around 78% of India's e-waste is not being collected or disposed by the government. In India, E-waste is managed through land filling, incineration, and recycling.*

**Keywords:** E-waste, Toxic components, hazardous to human health, E-waste management, land filling, incineration, and recycling.

### 41. Introduction

In the 21th Century, the information and communication revolution has brought enormous changes in the way we organize our lives, our economies, industries and institution. At the same time, these have led to manifold problems including the problem of massive amount of hazardous waste and other wastes generated from electric products [1]. It constitutes a serious challenge to the modern societies and require coordinated effects to address it for achieving sustainable development. Rapid growth of technology, upgradation of technical innovations, and a high rate of obsolescence in the electronics industry have led to one of the fastest growing waste streams in the world which consist of end of life electrical and electronic equipment product such as Refrigerator, Washing machines, Computers and Printers, Televisions, Mobiles, iPod etc. Many of which contain toxic materials [2].

According to Comptroller and Auditor-General's (CAG) Report, over 7.2 MT of Industrial Hazardous Waste, 4 lakh Tonnes of electronic waste, 1.5 MT of Plastic waste, 1.7 MT of medical waste and 48 MT of municipal waste are generated in the country annually. There are 10 states that contribute to 70% of the total E-Waste generated in the country. - 65

cities generate more than 60% of the total E-Waste in India [3].

Electronic waste contains toxic components that are dangerous to human health, such as mercury, lead, cadmium, polybrominated flame retardants, barium and lithium. The negative health effects of these toxins on humans include brain, heart, liver, kidney and skeletal system damage. The improper disposal of electronic products leads to the possibility of damaging the environment. As more e-waste is placed in landfills, exposure to environmental toxins is likely to increase, resulting in elevated risks of cancer and developmental and neurological disorders [5].

For the management of E-waste initiatives should be taken such as Extended Producer Responsibility; Design for Environment, Reuse, recycle technology platform for linking the market facilitating the circular economy aim to encourage consumers to correctly dispose of the e-waste, with an increased reuse and recycling rates, and also adopt sustainable [4,5].

### 42. Methodology

The methodology adopted for the review was carried out using Three steps

- i. A literature study was conducted to get an overview of the effect of E-waste on Environment and Human Health in India.

## EFFECTS OF PESTICIDES AND OVER FERTILIZERS ON THE DIVERSITY AND ASSEMBLAGE OF BUTTERFLIES IN AGROECOSYSTEMS OF LADKHED VILLAGE OF YAVATMAL DISTRICT

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### Abstract:-

Since life appeared on Universe, it has been studied numerous collective extinctions in which several species were exhausted because of disastrous climate change, pollutant activity, the impact and increased human approach and few other reasons we have not yet discovered. This paper helps people to look at the significance of butterflies as pollinators in various Indian agroecosystems. In present study the effect of Pesticides and over fertilizers in various cotton and adjacent agroecosystems for diversity of butterflies. In total 12 Cotton and Soybean fields were surveyed for accommodation and diversity with adverse effect of Pesticides like Profenofos, Cypermethrin and Proclaim. The higher quantity of Profenofos and Cypermethrin applied will affect resulting very low number of butterflies and Moths. Butterfly species by means of smaller bodies and which reproduces smaller number generations for every year seem to suffer most badly.

**Keywords:-** Assemblage, Butterflies, Diversity, Fertilizers Pesticides.

### I. Introduction:-

The manufacturing of pesticides ongoing in India from 1952 and India is now the second largest producer of pesticides in Asia followed by China and ranks twelfth globally (Mathur, 1999). The effects of purposeful use of pesticides have not yet been described for non-target fauna for which effects of other stressors, such as altering environment and alteration of soil.

Artropods comprises over half of Universe diversity of species (May, P.G. 1992). Butterflies are regarded as one of the preminent taxonomically considered group of insect (Aiswarya V. Nair *etal* 2014). India is described as a "Butterfly paradise" by Vankatramani (Venkataramani, G., 1986) Butterflies have been studied scientifically from the time of early 18th century, up to now 19,238 species recognized globally of which, 1,504 species found in India with 100 (15%) prevalent and 26 (1.08%) globally endangered species in India, 334 butterflies species were reported from the Western Ghats and 150 species from the Eastern Ghats region (Ashish D. Tiple, 2012).

Previously biologists haven't thoroughly examined pollination in agriculture by butterflies. Butterflies aren't as copious as bees, and they don't leave of their way to accumulate pollen. As compare to bees, whose furry bodies are simply covered in the pollen grains, butterflies have long, fragile legs that hardly ever encounter up against a flower's pollen-producing anthers. The major use of pesticides in India is for cotton crops (45%), followed by paddy and wheat.

### II. Material & Methodology

#### A. Study Area:-

Soybean and Cotton producing farms of Ladkhed village in Yavatmal district were selected for the above study, the village Ladkhed is about 20.32°N 77.77° E. Village Ladkhed is situated in Darwha Taluka of Yavatmal and 27 kilometres from district headquarters at Yavatmal. The forest around study area is dense with great floral and faunal diversity. The temperature of area ranges from 32.0°C to 40.0°C. The region receives an annual rainfall of 290.3 mm to 508.9 mm during the monsoon between June to September. The relative humidity varies from 25-59%.

## राष्ट्रीय शैक्षणिक धोरण २०२० मध्ये शिक्षक व विद्यार्थी भूमिका Role of Teacher and Student in NEP 2020

स.प्रा. भावना तायडे

एम. ए. मराठी (सेट)

श्री विठ्ठल रूखिणी कला, वाणिज्य व विज्ञान महाविद्यालय  
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प्रस्तावना -

मानवाला आपल्या पूर्ण क्षमता वापरता येण्यासाठी, समान आणि न्याय्य समाज विकसित करण्यासाठी तसेच राष्ट्रीय विकासाला चालना देण्यासाठी शिक्षण हा पाया आहे. भारताच्या सातत्यपूर्ण प्रगतीसाठी आणि आर्थिक विकास, सामाजिक न्याय आणि समानता, शास्त्रीय प्रगती, राष्ट्रीय एकात्मता आणि संस्कृतीचे जतन या क्षेत्रांमध्ये वैश्विक पातळीवर नेतृत्व करण्यासाठी सर्वांना दर्जेदार शिक्षण उपलब्ध करून देणे महत्वाचे आहे. व्यक्ती, समाज, देश आणि जगाच्या हितासाठी आपल्या देशातील समृद्ध प्रतिभा आणि संसाधनांचा पुरेपुर वापर करण्याकरता उच्च दर्जाचे सार्वभौमिक शिक्षण हा भविष्यासाठी सर्वात चांगला मार्ग आहे. पुढच्या दशकात जगातील सर्वात मोठी पुढाची लोकसंख्या भारतामध्ये असेल आणि त्या सर्वांना चांगल्या गुणवत्तेच्या शिक्षणाच्या संधी पुरवण्याच्या आपल्या क्षमतेवर आपल्या देशाचे भवितव्य ठरेल.

भारताने २०१५ मध्ये स्वीकारलेल्या शाश्वत विकासाच्या २०३० च्या कृती कार्यक्रमाच्या उद्दिष्ट ४ (SDG4) मध्ये 'जागतिक शिक्षण विकास कृती कार्यक्रम' समाविष्ट असून हे उद्दिष्ट २०३० पर्यंत "सर्वासाठी उच्च दर्जाचे आणि समान गुणवत्तेचे शिक्षण सुनिश्चित करणे आणि सर्वासाठी निरंतर अध्ययनाच्या शिक्षणाच्या संधींना प्रोत्साहन देणे" यासाठी प्रयत्न करण्याविषयी आहे. या उल्लेखित उद्दिष्टाकरता अध्ययनाला पाठिंबा देण्यासाठी आणि उच्च दर्जाचे शिक्षण प्रणालीची नव्याने रचना करणे आवश्यक आहे म्हणजे शाश्वत विकास कृती कार्यक्रम २०३० ची सर्व महत्वाची लक्ष्ये आणि उद्दिष्टे साध्य करता येतील.

ज्ञानाच्या बाबतीत जगामध्ये वेगाने बदल होत आहेत. बिग डेटा, मशीन लर्निंग, कृत्रिम बुद्धिमत्ता यासारख्या विज्ञानाच्या आणि तंत्रज्ञानाच्या क्षेत्रांमधील वेगाने होत असलेल्या विकासांमुळे जगभरातील अकुशल कामे आता कामगारपेशी वगैरे करू शकतील. त्याच वेळी, विशेषतः गणित, संगणक विज्ञान, आणि डेटा विज्ञान यातील कुशल कामगार्यांना तसेच विज्ञान, समाजशास्त्र आणि मानवशास्त्रे यांच्यातील बहुशाखीय क्षमता असलेल्या कुशल कामगार्यांना वाढती मागणी असेल. हवामान बदलाबरोबर, वाढते प्रदूषण आणि कमी होणारे नैसर्गिक स्रोत या परिणामांमुळे जगाची ऊर्जेची मागणी भागवण्यासाठी आता वेगळा दृष्टीकोन अंगीकारावा लागेल. वाढत्या साथी आणि नव्यन्याय यांच्या मुळे संसर्गजन्य रोगांच्या व्यवस्थापनात सहयोगाने संशोधन आणि लसींचा विकास करण्याची गरज निर्माण होईल. या सार्थीचा परिणाम म्हणून निर्माण होणाऱ्या सामाजिक समस्या बहुशाखीय शिक्षणाची गरज निर्माण करतात. भारत विकसित देश होण्याकडे वाटचाल करत असताना, तसेच जगातील सर्वात मोठ्या तीन अर्थव्यवस्थांपैकी एक होत असताना मानवशास्त्रे आणि कलेची मागणी वाढत जाईल.

खरोखर, रोजगाराची परिस्थिती आणि वैश्विक परिसंस्था वेगाने बदलत असताना, मुलांनी केवळ शिकणेच म्हणून ठरणार नाही तर कसे शिकायचे हे शिकणे जास्त महत्वाचे ठरणार आहे. त्यामुळे मजकूर कमी करून शिक्षण तांत्रिक विचार कसा करायचा आणि समस्या कशा सोडवायच्या, कल्पक आणि बहुशाखीय कसे व्हायचे, नविकल्पपूर्णता कशी आणायची, जुळवून कसे घ्यायचे आणि नवनविन आणि बदलणाऱ्या क्षेत्रातील नवीन सामग्री कशाप्रकारे आत्मसात करायची. या दिशेला वळले पाहिजे. शिक्षण अधिक अनुभवात्मक, सर्वसमावेशक, एकात्मिक, कलात्मक, संशोधनकेंद्रित, लवचिक आणि अर्थतत्वात्मक होण्यासाठी अध्यापनशास्त्र उत्क्रांत होण्याची गरज आहे. शिक्षणाच्या सर्व पैलू आणि क्षमता विकसित होण्यासाठी; आणि शिक्षण, सर्व दिशांनी विकसित होण्यासाठी समर्थन आणि शिकणाऱ्यासाठी अधिक समाधानकारक होण्यासाठी, अभ्यासक्रमात विज्ञान आणि गणिताच्या क्षेत्रांमधील मूलभूत कला, हस्तकला, मानवशास्त्रे, खेळ, क्रीडा आणि स्वास्थ्य, भाषा, साहित्य, संस्कृती आणि मूल्ये



## EFFECTS OF HIGHWAY SIDE POLLUTION ON ASSEMBLAGE OF NEPHILA PILIPS AROUND THE YAVATMAL CITY OF MAHARASHTRA

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### ABSTRACT

The impact of human actions on Natural resources became clear with the beginning of the Industrial Revolution. The present study reveals how ecological conditions in variously polluted regions of Yavatmal city may control metabolic activities of *Nephila* species which fluctuate the way of hunting, web construction, behavior, spatial allotment and systematic position. Concentration impact of pollutants in spiders collected at five polluted areas and one control site around Yavatmal city.

In present study spiders were observed for two years around Yavatmal City, few of them transplanted spiders from study areas to localized garden to study their persistence in the new environment and considered a group of environmental variables at local and landscape scales. The abundance of prey was closely linked with spider persistence, in both the survey and the transplant areas.

**Keywords:** Assemblage, Environment, *Nephila*, Pollutants, Yavatmal

### 1. Introduction

Arthropods can be used as indicators of environmental revolutionize more quickly than the vertebrates (Scherm et al. 2000; Gregory et al. 2009). For observational purposes, indicator assemblages should reveal unstable sensitivities to ecological alteration, and displays variety of life-history and ecological relations. Climate change comprise most important effect on geographic distribution of insect pests, and low temperatures are frequently more important than high temperatures in determining geographical distribution of insect pests (Hill 1987). Spiders are the most abundant and diverse group of organisms (Kannan and 2009; Gregory et al. 2009). Arthropods are the most important and diverse component of James terrestrial ecosystems and occupy a wide variety of functional niches and microhabitats (Kremen et al. 1993). The Nephilids are one of the largest spiders found in India. They can build webs with a typical diameter of more than 1 meter and can be identifying characters of the existence of spiders in or between trees. Females are extremely huge evaluated up to 45 mm while the males are smaller as compared to female which measures only up to 6 mm. Males are regularly found in or approximately around the web of the female. At the same time

along with males of Nephilids members of other family and genera like *Argyrodes* was also sheltered on borders of webs. Spiders from family Nephilidae are the biggest web-weaving spiders living today and are common and spectacular inhabitants of tropical and subtropical regions (Kuntner, M. & Coddington, J. A. 2009). *Nephila* females weave among the largest orb webs known with distinctive golden silk. *Nephila* males are relatively diminutive compared with their conspecific females, providing an example of extreme sexual dimorphism (Vollrath, F. 1998)

### Material & Methods

#### A. Study Area

Yavatmal is a district of the state Maharashtra. It is situated in the region of Vidarbha, in the east-central part of the state. Yavatmal is located in the Vidarbha region of the eastern part of the state. The land offers a wide magnitude of natural diversity with river valleys bordering drier plateau. Two major rivers runs along the district namely Penganga and Wardha with their many rivulets framing this land of Cotton and Jowar. for observation of spiders five different areas around were selected namely 1. Madkona Forest Zone; 2. Dhumnapur Forest Zone; 3. Chapdoh Forest

# Effects Of Asetap, Monosil and Profenofos on Assemblage of Spiders (Araneae) From Cotton Agroecosystems of Village Dongarkharda, Dist. Yavatmal, India

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The present work was carried out to know the effects of pesticides on the assemblage of spiders concerning for their diversity in Cotton agro-ecosystems from outskirts areas of Dongarkharda Village located in Kalamb Taluka of Yavatmal District. The survey was conducted in 3 different acres from same cotton farm for the diversity of spiders from September to December 2021, every weekend in the day time from 8 am to 6 pm. The spider fauna was collected mostly from Cotton trees, a ground of farm, beneath stones and in curled and dry leaves along with fencing of farms. In the Current study, we recorded the effect of locally used Pesticides Monosil, Asetap, and profenofos on the mortality, escaping behavior, feeding habits and activity of Acetylcholine esterase and Carboxyl esterase in two different spider's species namely *Neoscona theisi* and *Plexipus paykulli*. Utmost casualty (85%) in *Neoscona theisi* was reported against Profenofos, While Monosil was found to be least toxic. Spider Spent less time on insecticides or herbicide applied farm surfaces. Insecticides treated *Neoscona theisi* feed on less prey than naturally control spiders. Similarly, when *Neoscona theisi* were allow consumed insecticide treated prey, they feed considerably less. The outcome of the study revealed that Profenofos is more harmful to spiders as compared to Monosil and Asetap. It is recommended that the effect of all pesticides used in agro-ecosystem on beneficial arthropods must be evaluated before using them in the fields.

**Key Words:** - Asetap, Insecticide, Monosil, Pesticides, Profenofos.

## 1) Introduction:

Since the last few years, farmers in the Yavatmal region of Maharashtra have been challenged by pests like the pink bollworm on cotton which is assuming menacing proportions, and this year too farmers have noticed with alarm, an early onset of the pest. The dangerous chemical cocktail of pesticides used by farmers in the area has resulted in rampant pesticide poisoning.

Spiders are recognized as a Parasitoids predator which can feed on a diversity of arthropod families, are found among the arthropods including Odonata, Orthoptera, Homoptera, Lepidoptera, Diptera, Hymenoptera and other Araneae (Jackson and Macnab, 1989; Wise, 1993; Holland et al., 2004 and Tahir and Butt, 2009). Therefore, 48374 species of spider belonging to 4152 Genera and 120 Families (World Spider Catalogue, 2019) play an important role in agro-ecosystem by limiting the growth of insect pests (Chatterjee et al., 2009; Venturino et al., 2008).

This injudicious and indiscriminate application of pesticides is reported to affect adversely not only to human health and environment but also on the population of natural enemies viz., spiders (Hanna and Hanna, 2013 and Albin, et al., 2014), lady bird beetles (Ba M'hamed and Chemseddine, 2002 and Ahmad et al., 2011) and lacewings (Giolo et al., 2009, Cole et al., 2010, Fernandes et al., 2010, Marko et al., 2009 and Evans et al., 2010) described that extensive use of pesticides affect either by direct contact or spray drift. As spiders are found to be more susceptible to insecticides than other insect predators (Toft and Jensen, 1998), use of pesticides tend to decrease the population of spiders in the fields (Dinter and Poehling, 1995).

# Women And Media: An Analytical Study on Women Portrayal in Today's Time

Nasir Kasam Sheikh

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**Abstract-** This paper is a contemporary study on how the Media is projecting Women in today's time and what is actually required or expected from the media. We are still talking about equal chances and equal representation and coverage to Women in all the ways possible. This is not limited to Women as a homemaker or like a mere subject anymore. Women are doing wonders and adding to society but the Media is yet to understand that. The paper carries out a google survey from people aged between 15-50 years with good educational background establishing the fact that Media is the primary body which shapes the opinion of people and therefore certain changes, or in fact certain efforts are required from Media to project the image of a woman equally by producing good programmes, and giving unbiased coverage to them.

**Keywords:** Media, Women Portrayal, Equality, Position of Women in Media

## INTRODUCTION

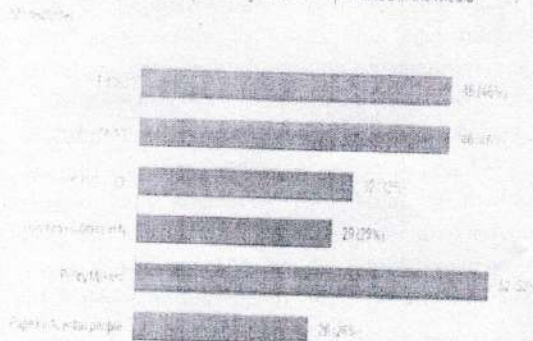
Since time immemorial humans have earned the range of distinctions from becoming great conquerors by shifting around erecting and destroying kingdom over kingdom to pioneering great business ventures which still crave to quench their thirst centering around the new business gimmick of 'demand and supply'. At the same time we may lag behind in terms of empowering certain sections which have been imploring for its emancipation and equal representation. One such section comprises 'women' which have been at the center of it. Over the course of time, besides investing into the contemporary scientific advancements we have equally succeeded in perpetuating existing gender inequalities, though vaguely visible but having the same and significant effect. These differences and inequalities tend to vary with time and place, and oftentimes result in stigmatization if tried to budge from the norm.

Seemingly, one of the most acclaimed avenues at this

crucial juncture should be the role of Media in ensuring non-stigmatized, non-stereotyped representation as well as a fairly dissected view from the old and conventional ways of portraying women and their problems. While we are entering into the tech age we must also be cognizant of the persisting difficulties faced by women in the workplace which oftentimes surfaces in the form of #MeToo and #TimesUp movements. It's true that we are narrowing down the gender gap and promoting gender parity in every possible manner but it's also true that we lag far behind the expectations.

Being an outlier takes a heavy toll even on capable and achieving women: ignoring presence, stifled voice, and exaggerated mistakes. Proliferation of information has now strengthened and become comparatively faster with the emergence of New Media. This has also enabled ill and corrupt elements to tap into the indecent portrayal of women through various platforms. In an attempt to protect women's dignity, the government, in 2012, consolidated a legal machinery by making amendments to the Indecent Representation of Women (Prohibition) Act, 1986. The ultimate aim was to put an end to the existing stereotypes which are still perpetuated through Multimedia Messaging Services and the Electronic Media.

Who is responsible for ensuring that all genders are represented in the media



# Women Entrepreneurship in Rural India: Key to India's Economic Growth

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*Abstract- In this globalized world, economic growth of a country totally depends on the participation of women in the rural development of a country. But where a society is dominated by man like India, where greater part of population lives in rural areas, it is very complicated for a woman to think about to establish their own startups. Rural Entrepreneurship amongst women has been a recent concern in rural India. Woman Entrepreneur is a person who accepts tough role to meet her personal needs and become economically independent. In India, there are around eight million women entrepreneurs, with Tamil Nadu having the highest share. This research paper mainly concerned with the women entrepreneurship situation in rural area of India. This is a based on secondary data from books, journals, articles, web sites and government reports. This study highlighted the current status of women entrepreneurs and their valuable contribution in sustainable economic growth of rural areas of India. This paper also focuses on the future scenario of women entrepreneurs and government initiatives for making women entrepreneurs more unbeaten. This study reveals some strategies for empowering rural women.*

## I. INTRODUCTION

Indian women have made themselves free from the control of the male dominated society, where women were treated only as "dharma" and keep them in the four walls of the house doing the household everyday jobs like cooking, washing clothes, giving birth to children and fostering them. Women put their footsteps in the corporate world not only as job seekers but also as job givers. Women have finally plunged into the rural business and have become an Entrepreneur. Indian women by becoming entrepreneurs have moved a step ahead from just having a corporate career which gave her financial

self-determination and growth to express her abilities. This shift has enabled her to go away from all this and enter into a world where she can build a difference in the corporate world along with creating a nick for herself.

Entrepreneurship is not a male prerogative. It has been evidenced that women entrepreneurship has gain momentum in the last three decades with the increase in the number of women enterprises and their substantive involvement to the economic growth in the country. The foreign Direct Investment Policy, technological advancements and manufactured exports in the Asia Pacific region have brought a broad range of economic and social opportunities for women entrepreneurs.

Women enter into entrepreneurship due to economic factors which pushed them to be on their own and support them to do something independently. Women prefer to work from their own work residence, difficulty in getting suitable jobs and desire for social appreciation which motivate them towards self-employment. A lot of women professionals in engineering, medicine, law etc. They are also set up hospitals, training centers, etc.

## II. REVIEW OF LITERATURE

P. JayaKumar and J. Kannan (2014) highlighted the challenges and opportunities before women for self-employment. Main challenges faced by the women are dual role of women overlapping of responsibilities of business and family, illiteracy among rural women, less risk bearing capacity, lack of information and assistance, need of training and development etc. with the increasing interest of government in women entrepreneurship created it as an opportunity for women.

Saigh (1992) identifies the reasons & influencing

## MARGINALIZED LITERATURE

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### ABSTRACT

*The paper presents scientific analysis of the marginalized literature which is de-notified by the system. Marginalized literature is the voice and reflection of the downtrodden, de-notified, oppressed, depressed, exploited class. This literature refused to be a plastic of cosmetic intellectualism. Marginalized literature flourished from the agony of the common people. They were ignored by the mainstream culture. Due to the reason marginalized writer to used their pen as like a barrel of a gun to dismantle all social disparities and also enlighten to the society. The marginalized literature exposed the burning life of downtrodden people. The grim situation deteriorating the life with dignity to a person will not be assured until the process of liberalization, privatization and globalization be reformed the marginalized class. The demand of the marginalized class dignity, honor, love, humanitiful life in the society.*

Now a days being various changes occurred in the world Literature. Nothing constant in the world only change is the constant that's may be comes true mouthless voice raised their voice for to get right. Marginalized literature come out from the ash of fire to lit up the life of the marginalized notified and de-notified caste. Struggled thousand years to be free and obtain the equal status in the society. It is essential to enter in power for attaining the rights of human being. Marginalized caste and religion is entitled to the realization of liberty in terms of civil, political, economic and social on equal terms with main stream culture. India is multiculturalists country in the world. There are various kinds of social structure flourished by the ancient times. Each one culture struggle for their own existence so for getting hard position in the main stream culture. Marginalized cast pursuing for long year to occupies the well position for their own identity and nationalism.

The paper presents scientific analysis of the marginalized literature which is de-notified by the system. Marginalized literature is the voice and reflection of the downtrodden, de-notified, oppressed, depressed, exploited class. This literature refused to be a plastic of cosmetic intellectualism. Marginalized literature flourished from the agony of the common people. They were ignored by the mainstream culture. Due to the reason marginalized writer to used their pen as like a barrel of a gun to dismantle all social disparities and also enlighten to the society. The marginalized literature exposed the burning life of downtrodden people.

Today when we see ratio of the Marginalized class of the higher education yet they arel so far from the equality. In 2008, of the total number of students in higher education, about 45

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**Comparison of National Education  
Policy 1986 And New Education  
Policy 2020**

— ❧ —  
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— ❧ —  
**Abstract:**

When the National Education Policy 1986 and 2020 were compared, it was noticed that the main points that remained unfinished in the 1986 National Education Policy have been reviewed. E.g. the 1980 policy recommended that 6 per cent of GDP should be spent on education. However, that recommendation was not implemented. Therefore, it has been included in the 2020 new education policy. Compared to 1986, many new educational policies are considered in this policy. The new academic policy recognizes interdisciplinary curricula. Then b. Ed's curriculum integration has been extended to four years. The new education policy also envisages how to make education more inclusive by considering the age group of 3 to 18 instead of 6 to 14 in the Right to Education Act. The idea is to disseminate the education system through a new educational policy and the establishment of a National Education Commission by dissolving all institutions related to education. In addition to the assessment of students, the assessment of teachers will also be done in this new policy. Students will be assessed not only by the teacher but also by his classmate, the teacher co-curricular activity. The most important change is the change in the structure of education, which will now be 5 + 3 + 3 + 4, according to

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which the first five years of education will be known as formal education. There will be new job opportunities for teachers, in which the system like Shikshan Sevak has been discontinued. Eligibility test will be conducted for teacher recruitment. In addition; the first five years of education will be given in the mother tongue, including business education from class VI.

**Keywords:** NEP, HEDC, Ministry, system, education etc.

**Introduction:**

The Policy adopted by the Government of India to promote education among Indian citizens. The policy outlines what primary and college education should look like in rural and urban India. In 1968, the then Prime Minister Indira Gandhi first formulated the National Education Policy. Since then, necessary changes have been made in it from time to time. After 1947, the Government of India launched various programs to address the problem of illiteracy among the citizens of independent India. Among them, Maulana Abdul Kalam Azad, the first Minister of Education of India, devised a uniform system of education for the whole country and brought it under the control of the Central Government.

He proposed University Education Commission (Dr. Radhakrishnan Commission), Mudaliar Commission and Kothari Commission to bring modernity in Indian education. The first Prime Minister of India Jawaharlal Motilal Nehru and the Central Government formulated a high quality scientific policy and established the National Council of Educational Research and Training on September 1, 1961. This institute studies all the problems related to school education in the country. The State Government and the Central Government are expected to advise this institution on the planning and implementation of educational policies.

**Current Requirements of the New Education Policy:**

1. Although the minimum percentage of education in the country is

NEW EDUCATION POLICY 2020

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