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Euphorbia sahyadraca (Euphorbiaceae), a new species of succulent shrub from the wet zone of the northern Western Ghats, Maharashtra, India

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Abstract

Euphorbia sahyadraca (Euphorbiaceae), a new succulent species belonging to *Euphorbia* subg. *Euphorbia* sect. *Euphorbia* is described and illustrated from the Raigad district of Maharashtra, India. It is related to *E. nivulia* but differs in its shrub-like habit, bark with closely-packed horizontal branch scars, elliptical-shaped leaf with short petiole and easily visible lateral veins, protruding tubercles with two pairs of spines per spine shield, bisexual cyathia in the central sessile position on the cyme, and capsules that have laterally tapering cocci without bulging suture lines between the cocci.

Keywords: Endemism, eudicots, Euphorbioideae, Sahyadris, taxonomy

Introduction

The genus *Euphorbia* Linnaeus (1753: 450) (Euphorbiaceae) consists of ca. 2100 species according to the Planetary Biodiversity Inventory Euphorbia Project (Riina & Berry 2021), 2046 species according to The Plant List (2013), and 1900 species according to Mabberley (2017). This genus comprises herbs, geophytes, succulents, shrubs, and trees. Dorsey *et al.* (2013) puts the number of species in *Euphorbia* at ca. 2000, in *E.* subg. *Euphorbia* at 661, of which 343 are in *E.* sect. *Euphorbia*. Members of this section generally range from Africa across the Middle East into South and Southeast Asia, having diversified in the arid and semi-arid regions of the tropics and subtropics (Dorsey *et al.* 2013). Some of these species however are well adapted to regions of high rainfall, i.e., *E. epiphylloides* Kurz (1874: 416) in the Andamans, and *E. susan-holmesiae* Binojk. & Gopalan (1993: 277), *E. santapauli* A. N. Henry (1965: 329), and *E. vajravelii* Binojkumar & Balak. (1991: 229) in the southern Western Ghats. Dorsey *et al.* (2013) confirmed the work of others in that the Indian members of *E.* sect. *Euphorbia* are clearly nested within the African phylogenetic tree, implying that they evolved from a common African ancestor or ancestors.

Binojkumar & Balakrishnan (2010) recognized 84 species of the genus *Euphorbia* in India, with only 13 in *E.* sect. *Euphorbia*. Recent genetic studies of the Indian geophytes and the tropical shrub *E. epiphylloides* from the Andamans, have placed these plants under *E.* sect. *Euphorbia* (Bruyns *et al.* 2006: 406, Zimmermann *et al.* 2010: 46, 49). These plants together with several recent discoveries such as *E. belagaviensis* Sarojin. & Raja Kullayisw. (*in* Naidu 2018: 24), *E. venkatarajui* Sarojin. (*in* Naidu 2017: 359) and *E. gokakensis* S.R. Yadav, Malpure & Chandore (*in* Malpure *et al.* 2016: 380) adds to the number of Indian species in *E.* sect. *Euphorbia* at approximately 20. This number will undoubtedly change as further research is conducted.

Though much has been published about various species in *E.* sect. *Euphorbia* in India, our studies revealed that there are still problems, suggesting that additional critical analyses and taxonomic studies are necessary for the further circumscription of dendroid succulent species. With the intention of rectifying some of these problems, populations of succulent *Euphorbia* from different parts of India were collected and studied. During these studies, a wet zone population from Harihareshwar, Raigad district, Maharashtra state could not be assigned to any of the known species.

Survey of Medicinally Important Weeds from Western Region of Kopargaon, District- Ahmednagar (M.S.), India

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Abstract:- The survey of medicinally important weeds was carried out from Western Region of Kopargaon during the year 2018 to 2019. The present studies revealed that, near about 58 species belonging to 35 families were recorded from this region. Plant identification was carried out by various floras and manuals. Most of these weed plants recorded are used by people to cure various diseases and used as crude drugs. The various parts of plants such as roots, stems, leaves, flowers, fruits, seeds, rhizomes, tubers, lattices or sometimes entire plant is used as medicines to cure various diseases. These therapeutically important plants constitute various active principles which cause the physiological effect on the body and cure the diseases.

Keywords:- Survey, Medicine, Weeds, Flora, Kopargaon.

I. INTRODUCTION

From very ancient period of time plants are playing very important role in human welfare. All the three basic needs like food, shelter and clothing are fulfilled by plants and its products. Besides these, medicine is important need of human being. From very ancient period of time, plants are used to cure various diseases.

Weeds are unwanted plants growing in the field. Weeds cause the serious problem to the farmers. They absorb the nutrients from the field, growing vigorously and ultimately affect the crop production. But some weeds are used as crude drugs by many people. Folklore medicinal plants constitute a group of therapeutically important plants which are of great value for domestic use and also for export. Plant based drugs are being increasingly preferred in medical science. The use of various parts of plants has very specific capacity which causes the physiological effect on the body and cure the diseases. India have rich heritage of folklore medicinal plants.

Kopargaon is situated at Northern region of Ahmednagar district. It is an irrigated area and rich in biodiversity of medicinal and aromatic plants. Survey of medicinally important weeds was carried out from the Kolpewadi to Wadgaon village which is the boundary of Nashik district and is western part of Kopargaon taluka. Near about 15 km area is covered for the study purpose. The vegetation of the study area was rich in the herbaceous flora as it is irrigated throughout the year. Survey of medicinally important plants and its medicinal values was

studied by many workers in India like Auti, 1911; Mohaptra and Behera, 2011; Rao *et al.*, 2011; Behera and Sen, 2007; Rajaram *et al.*, 2014; Basu and Ramsankar (2007), etc. But this area was untouched and so it was undertaken for the investigation

II. MATERIALS AND METHODS

Monthly collection of plants was carried out for the year 2018-19. During present studies, the medicinally important weeds from the selected area of Western Region of Kopargaon taluka were collected. The identification was done with the help of relevant floras, manuals and relevant literatures (Cooke, 1903; Sutaria, 1962; Pradhan and Singh, 1999; Kirtikar and Basu, 1984; Deokar, 1998; Kokate *et al.*, 2016). Enumeration of plants is done by using botanical names, family names, plant parts used and curing diseases. Plants are arranged according to alphabetical manner.

III. RESULTS AND DISCUSSION

During present studies, extensive survey of medicinally important weed plants from the study area was carried out, plants are identified with relevant floras and enumerated in tabular form (Table.1).

Many workers have studied the medicinally important plants from various regions of the country. Auti (2011) studied the medicinal flora of Angiosperms from Jeur (Bayajabai), District Ahmednagar while, extensive survey of folklore values of weeds grown in wastelands of Vedharanyam and Kodiakarai, Nagapattinam district of Tamil Nadu was made by Basu and Ramsankar (2007). Mohaptra and Behera (2011) studied the medicinal plants along the water stream of Pradhanpat water fall of Deogarh forest range in Deogarh district (Orissa). Behera and Sen (2007) investigated the traditional use of some plants against gynaecological disorders by the tribals of Ramkhol village forest of Barapahad hill range in Bargarh District (Orissa) while, Rao *et al.* (2011) have pointed out the indigenous phytotherapy for Gastro-Intestinal Disorders among tribals of Dhenkanal district, Orissa. Rajaram *et al.* (2014) has studied herbal remedies for common ailments prevailing in rural areas of Palladam and Perumanallam, Tiruppur district, Tamil Nadu. Tripathi *et al.* (2007) studied the medicinal plants of Northern Hill Region of Chhattisgarh and their uses.



MONITORING OF DRINKING WATER RESERVOIRS OF KOPARGAON CITY WITH SPECIAL REFERENCE TO ALGAL FLORA AT YESGAON, DIST. AHMEDNAGAR MAHARASHTRA (M.S.), INDIA



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ABSTRACT

Algal collection from 5 drinking water storage reservoirs of Kopargaon city was carried out for one year. A total 39 genera and 62 species belonging to four classes were encountered during investigation period. Present studies revealed that, algal population was not found homogenous throughout the year, but it showed seasonal variation. During monsoon the algal population recorded was less, which increases in winter and found more in summer season. Chlorophyceae was found to be the dominant group throughout the investigation period in all storage tanks consisting of large number of genera and species. Many planktonic, some benthic and epiphytic algae were encountered during investigation period at all five water storage reservoirs. The commonly occurred genera were Ankistrodesmus, Closterium, Cosmarium, Spirogyra, Ulothrix from class Chlorophyceae, while from Cyanophyceae, Merismopedia, Microcystis, Oscillatoria, and Lyngbya are dominating forms. Desmids were found in dominant condition in all storage tanks indicating unpolluted condition of water. Maximum population of Cosmarium was recorded during summer season, while Closterium species were recorded throughout the year. Other genera recorded were Staurostrum, Xanthidium, Euastrum, Micrasterias, Arthrodesmus, Desmidium, etc. Diatoms were recorded more in number during winter, while Euglenophycean members were sparsely reported only in summer. During present studies tremendous variations in Desmid diversity was noticed during summer and winter as compared to monsoon season.

1. INTRODUCTION

Water is most useful natural resource on the earth. From the origin of universe, water is being remained most important material for civilization. It is one of the vital resources for all kinds of life on the earth. In rural areas, there is more scarcity of water for irrigation as well as drinking purpose particularly in winter and summer seasons.

In many areas of country, large sized ground-based water storage tanks are constructed. These are filled when water is available and then it is used for drinking purposes after purification. These water reservoirs are present in open condition and so the algal flora is growing luxuriously throughout the year in these water reservoirs. When water tanks are at the range of empty, at that time algal blooms are formed. This algal flora imparts the unpleasant

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PREPARATION OF LIQUID BIO-FERTILIZERS OF PLANT SOURCES AND THEIR EFFECT ON PLANT GROWTH

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ABSTRACT:

In this paper preparation of liquid bio-fertilizer of plant sources and their effect on plant growth by using *Moringa* leaf, Banana peel and *Aloe vera* juice. For preparation of liquid bio-fertilizers by fermentation process (Satish Mohod) different parameters like the plant height, pH, stress condition, seed germination percentage, and chlorophyll content etc have studied and all parameters showed the significant result.

Key words: - *Liquid extract, pH, chlorophyll Content, stress condition, fermentation.*

INTRODUCTION:

Bio fertilizer is a substance which contains living microorganism which, when applied to seed, plant surface or soil colonizes the rhizosphere or the interior of the plant promotes growth by increasing the supply or availability of primary nutrients. Fertilizers directly increase soil fertility by adding nutrient. Bio fertilizer add nutrients through the natural processes of fixing atmospheric nitrogen solubilising phosphorous and stimulating plant growth through the synthesis of growth promoting substance. Liquid bio fertilizers are suspension having agriculturally useful microorganisms, which fix atmospheric nitrogen and solubilise insoluble phosphate and make it available for the plant. Liquid bio fertilizer formation is the promising and updated technology which in spite of many advantages over the agrochemicals left the

considerable dispute among the farmer community in terms of several reasons, major being the viability of the organisms. Liquid bio-fertilizers increasingly available in the market as one of the alternatives to chemical fertilizers and pesticides. Bio-fertilizers add nutrients through the natural process of fixing atmospheric nitrogen, solubilising phosphorous and stimulating plant growth through the synthesis of growth promoting substances. They can be categorised in different ways based on their nature and function, one simple broadly disseminated classification is as follow

- ❖ Nitrogen bio-fertilizer.
- ❖ Phosphorous bio-fertilizer.
- ❖ Compost bio-fertilizer.

Soil is natural habitat of variety of agriculturally beneficial microorganism certain soil microorganism have and an ability to absorb



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Research Article

ALLELOPATHIC EFFECT OF *CASSIA TORA* L. LEAF EXTRACT ON SEED GERMINATION AND SEEDLING GROWTH IN MAIZE (*ZEA MAYS* L.)

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Allelopathy, Aqueous extract, Maize.

ABSTRACT

This study conducted Allelopathic effects of *Cassia tora* L. on the seed germination and seedling growth of *Zea mays* L. For 24 hours, dried powdered *Cassia tora* leaves were soaked in 1000ml distilled water to obtain aqueous leaf extract (20%). The seeds were handled from 20% stock solution with 5 percent, 10 percent, 15 percent, 20 percent, 25 percent, and 30% concentration. The sprouted seeds were checked following seven days and determined root shoot length following 14 days. Relative allelopathic impact on seed germination, root and shoot span over control was resolved. This investigation found that *Cassia tora* leaves aqueous extract had inhibiting effects on seed germination. The relative percentage effect slowly increases as control concentration increases. It also affected root and shoot length.

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INTRODUCTION

A plant interacts with other plants to establish itself in a new habitat and make the community, subsequently disturbs the biodiversity. The plant produces some chemical compounds and releases out into the environment. This chemical compound demonstrates positive or negative biochemical activity between plants and weeds, and plants and microorganisms by creating chemicals that escape in the atmosphere. Allelopathy is a complex phenomenon that depends on the concentration of allelochemistry. It has both inhibitory and stimulating effects, which may be determined by the concentration of allelochemistry present in the extraction process. The term allelopathy, derived from Greek compounds allelo (mutual harm or suffering), was first coined and described as allelopathy. Weeds influence growth by releasing allelochemicals into the growing atmosphere^{3, 6}. Weeds are a significant problem in agriculture fields worldwide, most weed organisms have inhibitory effects on crops, but others have stimulating effects on crops by affecting germination, height, shoot duration, and other growth parameters.

Allelopathic influence is an essential mechanism for effective weed spreading establishment-*Cassia tora* L. (*Senna tora*, Roxb. Family- Caesalpinaceae). It grows wild in numerous tropics and is usually seen as a weed. It is a neighborhood in Central America. *Cassia tora* is a yearly herbaceous zest. The plant can grow 30–90 centimeters (12–35 in) tall and includes

choice pinnate leaves with handouts generally with three different sets, obovate with a balanced tip. The leaves make to 3–4.5 centimeters. Youthful stems have specific smelling foliage. The blossoms happen two by two in axils of leaves with five petals and light yellow in shading. The stamens are of inconsistent length. The units are to some degree leveled or four calculated, 10–15 cm long and sickle formed, consequently the normal name sickle case. There are 30–50 seeds inside a case. In the current examination, allelopathic impacts of fluid concentrate of leaves of *Cassia tora* L. on seed germination and seedling development in *Zea mays* L. were considered.


MATERIALS AND METHODS

Preparation of aqueous leaf extract- The *Cassia tora* L. collected from the wastelands of Kopargaon city when the plant was in the flowering stage, and the dry shade of 200 g of powdered leaves was soaked in 100ml of distilled water for 24hrs in laboratory condition. The fluid concentrate was gathered as a blend filtrate, and the last volume was set to 1000ml, bringing about a 20% watery concentrate. The concentrate was known as a stock arrangement, and a grouping of arrangements of different dilution concentration (5 percent, 10 percent, 15 percent, 20 percent, 25 percent, and 30 percent) was set up through dilution with filtered water.

Treatments and experimental design- The certified healthy and equally sized hybrid seeds of variety S-6668 of maize (*Zea*

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Extraction and Isolation of fruit pigment of Dragon fruit (*Halocereus polyrhizus*), Beet root (*Beta vulgaris*), Lemon fruit (*Citrus limon*) and formulation of herbal lipstick

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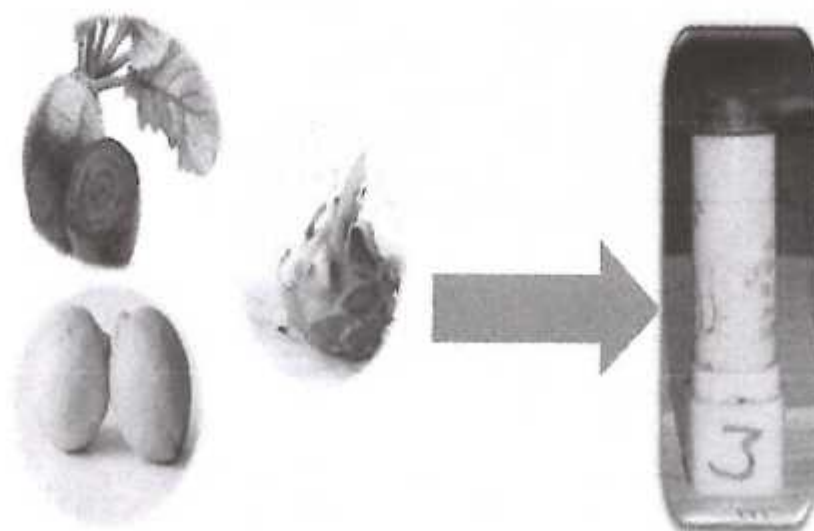
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Abstract: Cosmetics is one of commodity that used daily by the human society in abundant amount without considering their side-effect, now days women uses large amount of synthetic cosmetic that produces the hazardous effect on the skin and health. In order to avoid the skin loss, alternative option is available i.e. herbal cosmetics. In this investigation we are presenting the herbal formulation of lipstick by using pigment few medicinal important plants. Here we have selected raw material like Dragon fruit (*Halocereus polyrhizus*), Beet root (*Beta vulgaris*), Lemon fruit (*Citrus limon*) and some ingredients for essence and flavor. With help of this plant material the herbal lipsticks are prepared in different concentration 10.81, 19.51, 26.66, 24.48, 37.73, 42.10%. The evaluation of the herbal lipstick was done with different parameter such as color, pH, melting point, surface anomalies, ageing stability, perfume stability, skin irritation etc. On the basis of these parameters it was concluded that this formulated herbal lipstick showed minimal or no side effects and thus showing maximum local effect on lips.

Keywords: Herbal lipstick, Formulation and Evaluation, Dragon fruit, Beet, Citrus

Graphical Abstract




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Resin loaded palladium nanoparticle catalyst, characterization and application in C–C coupling reaction

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Abstract

Macroporous ion-exchange resins were used to immobilize palladium (Pd) metal in order to produce nanoparticle catalysts. The complexation of palladium acetate and the following reduction with NaBH₄ resulting Pd nanoparticles are loaded on to DIANION™ PK228 macroporous cation exchange resins. Palladium loading was characterized by inductively coupled plasma-atomic emission spectroscopy, field emission scanning electron microscope/energy-dispersive X-ray spectrometry, BET (Brunauer–Emmett–Teller) and HR-TEM. Palladium nanoparticles are loaded on to DIANION™ PK228 macroporous cation exchange resin which shows an excellent catalytic activity for Suzuki–Miyaura cross coupling reaction. Furthermore, the catalyst can be recycled without significant loss of its catalytic activity up to ten times.

Keywords Environment-friendly synthesis · Palladium nanoparticles · ICP-AES · FESEM/EDS · HR-TEM · BET (Brunauer–Emmett–Teller) · Cation exchange resin · C–C coupling

Abbreviations

ICP-AES	Inductively coupled plasma-atomic emission spectroscopy
FE-SEM/EDX	Field emission scanning electron microscope/energy-dispersive X-ray spectrometry
BET	Brunauer–Emmett–Teller
CH ₂ Cl ₂	Dichloromethane
PdNP@DIANION™ PK228	Palladium loaded on the surface of resin
EDS	Electron diffraction spectroscopy

1 Introduction

Homogenous Pd nanoparticle catalysts are widely used in many coupling and cross coupling reactions, such as Heck, Stille, Suzuki–Miyaura, Sonogashira, and Buchwald–Hartwig reactions. These catalysts trigger high reaction rates and great selectivity [1]. The field of catalysis has evolved to focus not only on altering the rate of a certain reaction, but also making the process environment-friendly, more efficient and more economical. On the other hand, homogenous catalysts are difficult to recycle and difficult to separate them easily, which leads to the loss of the expensive metals and hence it is essential to remove the impurities from the products [2]. This problem poses a big challenge to the industry as to how to make application of homogenous Pd nanoparticles catalysts in coupling reactions.

In order to solve this problem, heterogeneous Pd nanoparticles catalysts are better alternatives for the coupling reactions. Various solid supports, such as activated carbon

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Original Research Article

Biosynthesis of silver nanoparticles using leaf and bark extract of indian plant *carissa carandas*, characterization and antimicrobial activity

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ABSTRACT

Biosynthesized silver nanoparticle is a very expanding and useful area. The reductant material in the plant extracts (leaves and bark) of *Carissa carandas* can produce silver nanoparticles. The plant leaves and bark extract of *Carissa carandas* act as reducing and capping agent. Conventionally, chemical reduction is the most frequently applied approach for preparation of metallic nanoparticles; however, it might be hazardous to environment. In the present work we report eco-friendly, cost effective, and green approach for the synthesis of AgNPs by using 0.02 M AgNO₃ solution and plant extracts (leaves and bark) of *Carissa carandas* as reducing and capping agent. The synthesized nanoparticles were characterized using UV-VIS spectrophotometer, XRD, FT-IR, FE-SEM, and ICP-AES analysis. The biosynthesized silver nanoparticles showed a comparable antimicrobial activity against *Staphylococcus aureus*, *Escherichia coli*, and *Aspergillus niger*. Antimicrobial activity of the biosynthesized silver nanoparticles suggests their possible application in medical and pharmaceuticals industry.

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Silver nanoparticles synthesis using AH leaf extract and its antimicrobial activity

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Crystallized silver nanoparticles (AgNPs) were synthesized by using the eco-friendly *Artocarpus heterophyllus* biomaterial. The synthesis of AgNPs was a green approach and a rapid method. The AgNPs were characterized by field-emission scanning electron microscopy (FE-SEM), Fourier transform infrared spectroscopy, X-ray diffraction and inductively coupled plasma atomic emission spectroscopy. The FE-SEM analysis showed that the size of the synthesized AgNPs ranged around 45 nm. The plant leaves acted as both a reducing and a capping agent. The synthesized AgNPs showed an absorption peak at 400–440 nm. The biosynthesized AgNPs were tested for their antimicrobial activity against both the gram-positive bacterium *Staphylococcus aureus* and the gram-negative bacterium *Escherichia coli* and the fungus *Aspergillus niger*. The method used in the present work is simple, rapid, single-step, environment-friendly and very cheap and is an alternative to the current physicochemical methods. The antimicrobial activity of biosynthesized AgNPs suggests their possible application in the medical and pharmaceutical industry.

1. Introduction

The application of nanoscale materials, particles, composites and structures, usually ranging from 1 to 100 nm, is an emerging area of nanotechnology and nanoscience.^{1,2} Nanoparticles show improved and specific properties, based on specific characteristics, such as distribution, grain size and morphology, compared with the larger particles of the bulk material; nanoparticles synthesized by using plant extracts show larvicidal and non-toxic properties.^{3,4} Although nanoparticles can be manufactured using various chemical methods,^{5,6} the nanoparticles synthesized by using such methods are toxic and lead to non-eco-friendly by-products.^{7,8} In physicochemical methods, the chemicals used for the synthesis of nanoparticles are toxic and hazardous to the environment.

Environment-friendly, non-toxic, easier, non-hazardous protocols are thus needed for nanoparticle synthesis. Biological systems, such as plants^{9–11} and biosurfactants,¹² have long been known to reduce metal ions into nano-sized and specified particles like high surface to volume ratio to enhance catalytic activity. The plant-mediated green approach is rapid and effective and has a fast reduction rate, and the procedure itself requires no specific conditions, unlike physical and chemical methods.^{5,6,13} The biogenic method of synthesis appears to be reproducible, and the particles, nanostructures and materials produced through this method are environment-friendly and found to be highly stable.¹⁴ The anticancer activities of nano-sized platinum, palladium, silver (Ag) and gold particles have been evaluated against a variety of human cancer cells.^{8,11} Recent reports include the biosynthesis of silver nanoparticles (AgNPs) using leaf extracts of *Chenopodium murale*¹⁴ and carob¹⁵ and the flower extract of marigold.¹⁶

The jackfruit (*Artocarpus heterophyllus*) is one of the most significant trees in tropical home gardens and the most widespread and useful tree belonging to the important genus *Artocarpus*. *A. heterophyllus* is a species of tree of the mulberry family (Moraceae). It is native to Western Ghats of India and Malaysia and is also found in central and eastern Africa, the Caribbean, Florida, Australia, Brazil, southeastern Asia, Puerto Rico and many Pacific islands.¹⁷

The presence of natural antioxidants in *A. heterophyllus* prompted the authors to use its leaf extract as a suitable source for the biosynthesis of nanostructures, nanomaterials and materials. In this paper, the authors report the biosynthesis of AgNPs using *A. heterophyllus* leaf extract. To the best of the authors' knowledge, there has been no report on the biosynthesis of AgNPs using *A. heterophyllus* leaves and bark extract as a stabilizing, capping and reducing agent.

2. Materials and methods

All the chemicals were purchased from Merck, Ratnagiri, Maharashtra (MS), India, and used without purification. Dried leaves of *A. heterophyllus* were collected from MIDC, Mirjole, Ratnagiri, MS, India, and they were air-dried in sunlight and used for further experiments.

2.1 Preparation of leaf extract

2.1.1 Preparation of *A. heterophyllus* leaf extract

Ten grams of the air-dried powder of *A. heterophyllus* leaves was added to 100 ml of distilled water, and then the mixture was boiled slowly for 20 min. Then, the mixture was cooled to room



FULL TEXT LINKS



> [Mol Divers.](#) 2021 May;25(2):937-948. doi: 10.1007/s11030-020-10079-1. Epub 2020 Apr 5.

N-Benzoylation of 6-aminoflavone by reductive amination and efficient access to some novel anticancer agents via topoisomerase II inhibition

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PMID: 32249379 DOI: 10.1007/s11030-020-10079-1

Abstract

Series of novel N-benzyl derivatives of 6-aminoflavone (9a-n) were synthesized and evaluated for anticancer and topoisomerase II enzyme inhibition activity. All the synthesized compounds were screened for in vitro anticancer activity against human breast cancer cell line (MCF-7) and human lung cancer cell line (A-549). Among the synthesized compounds, 9f and 9g were found to be the most potent anticancer agents against human breast cancer cell line (MCF-7) with IC₅₀ values of 9.35 μM and 9.58 μM, respectively. Compounds 9b, 9c and 9n exhibited promising anticancer activity against human lung cancer cell line (A-549) with 43.71%, 46.48% and 44.26% inhibition at the highest concentration of 10 μM, respectively. Compounds 9c, 9f and 9g have ability to inhibit the topoisomerase II enzyme. Compound 9f showed most potent topoisomerase II enzyme inhibition activity with IC₅₀ value of 12.11 μM. Further, these compounds have a high potential to be developed as a promising topoisomerase II inhibitors.

Keywords: Aminoflavones; Anticancer agent; Buchwald coupling; Malic acid; Reductive amination; Topoisomerase II enzyme inhibitor.

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> [Bioorg Med Chem Lett](#). 2020 Jul 15;30(14):127246. doi: 10.1016/j.bmcl.2020.127246.

Epub 2020 May 5.

Synthesis and evaluation of novel sulfonamide analogues of 6/7-aminoflavones as anticancer agents via topoisomerase II inhibition

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PMID: 32527548 DOI: 10.1016/j.bmcl.2020.127246

Abstract

A series of new sulfonamide analogues of 6/7-aminoflavones were synthesized by using molecular hybridization approach. These new sulfonamide analogues were screened for antiproliferative activity against human hepatocellular carcinoma (HepG-2), human lung cancer cell line (A-549), human colorectal adenocarcinoma (Caco-2) cancer cell lines. Compounds 5p, 5q, 5t, 5v, 5w and 5x exhibited good anticancer activity against selected cancer cell lines. These compounds were further evaluated to predict their ability to inhibit topoisomerase-II enzyme. Compound 5x has shown potent antiproliferative activity (IC₅₀ value 0.98 μM) as compared to standard drug Adriamycin (IC₅₀ = 0.94 μM) indicating that these compounds exhibits anticancer activity via inhibition of topoisomerase-II enzyme. Docking results also have supported above observations by indicating that compounds are held in the active pocket by combination of various hydrogen and hydrophobic interactions with Top II-DNA-etoposide enzyme.

Keywords: Aminoflavones; Anticancer activity; Docking; Sulfonamide; topoisomerase-II.

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A Pilot Survey Of Machine Learning Techniques In Smart Grid Operations Of Power Systems

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Abstract: The smart grid discusses to next generation power grids, with multi-directional streams of electricity and evidence to make aextensive distributed network. Through smart grid, the power system converts smart by communicating, sensing, control and applying intelligence. For superlative system, the smart grid technologies are furthercompanionable to certify many roles which can elevate with the amalgamation of the use of substance generation and transmission. The Smart grid is also kept the environment free from pollution; diminish the cost, effective operations, against all categories of threats and danger. Machine learning process isthe calculations which help in information handling to discover concealed examples or the forecast of results. The target of this archive is to look at the most utilized strategies of machine learning, for example, Vector Machine Backing, Descriptive Discriminant Analysis, Dqcision Trees what's more, Neural Networks, in Smart Grid applications. To this end, an examination is done in important distributions of the current writing.

Keywords: Machine learning, Smart Grids, Power Systems, Security Operations, Distributed Energy Sources.

1. INTRODUCTION

Nowadays the issue of voltage strength has liberated the electric market and development of energy utilization. Voltage system stability alludes to the capacity of a force framework to keep up consistent voltages at all transports in the framework subsequent to being exposed to aunsettling influence from a given starting working condition. The past electromechanical lattices have been based on vertical coordinated utility structure to control and produce power. As of late, these force networks have the different various sorts of operational difficulties, for example, reservations in the timetable, expanding infiltration of inexhaustible frameworks, and so on These moves lead to capricious horrendous functions as a result of restricted consciousness of the executives' staff and other physical and digital


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Physico-Chemical Status of Agricultural Soil in Selected Villages in Shrirampur Tehsil of Ahmednagar District (Maharashtra State)

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Abstract

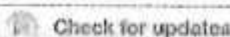
The present study was carried out to measure the Physico-chemical analysis of soil samples in selected villages of Shrirampur tehsil of Ahmednagar district. A simple random sampling technique was employed for the selection of soil samples. Herein we have collected a total of 20 soil samples between 2017 and 2018 from 4 different village's viz. Govardhanpur, Gujarwadi, Kadit Budruk and Kadit Khurd of Shrirampur Tehsil. The physical properties of a generally black and deep black type of soil are having a moderate level of textural profile and water holding capacity taken into account. Analysis of chemical parameters clearly shows that soil pH ranges from 7.33 to 9.13 and electrical conductance ranges from 0.10 to 0.52 dS/m-1 indicate non-saline and alkaline types of soil. Moderate to the high proportion of NPK and good organic carbon present in most of the soil samples indicate highly fertile soil whereas, Sulphur and Boron Nutrients deficiency was observed in sample villages. Therefore, there is a need for proper utilization of manures and chemical fertilizers in agricultural practices.

Key words: Physico-Chemical, Soil Fertility, Soil Status, Organic Carbon.

Introduction

In any agricultural operation, the soil is of the utmost importance as it is the cradle for all crops and plants. The topsoil having an average depth of about 15 to 20 cm on the face of the land is the natural body of soil on which plants grow and the farming activities flourish. The standard of living of people depending on agriculture is often determined by the fertility and productivity of soils (Majid Husain, 1996). Soil macronutrients, namely, nitrogen, phosphorus, and potassium are critical elements for crop growth and yield (Pritty S Babu, 2020). In recent years, the adoption of high yielding varieties and the use of N, P, K fertilizers led to a decline in the status of sulphur and micronutrients in the soil to below normal at which productivity of crops cannot be sustained. Inventory of available S and micro-nutrients status of the soil helps in demarcating areas where application P particular nutrients are needed for profitable crop production (Ranvir Singh and Sarika Yadav, 2017).


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Nanostructured N doped TiO₂ efficient stable catalyst for Kabachnik–Fields reaction under microwave irradiation†

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Herein, we report nitrogen-doped TiO₂ (N-TiO₂) solid-acid nanocatalysts with heterogeneous structure employed for the solvent-free synthesis of α -aminophosphonates through Kabachnik–Fields reaction. N-TiO₂ were synthesized by direct amination using triethylamine as a source of nitrogen at low temperature and optimized by varying the volume ratios of TiCl₄, methanol, water, and triethylamine, under identical conditions. An X-ray diffraction (XRD) study showed the formation of a rutile phase and the crystalline size is 10 nm. The nanostructural features of N-TiO₂ were examined by HR-TEM analysis, which showed they had rod-like morphology with a diameter of \sim 7 to 10 nm. Diffuse reflectance spectra show the extended absorbance in the visible region with a narrowing in the band gap of 2.85 eV, and the high resolution XPS spectrum of the N 1s region confirmed successful doping of N in the TiO₂ lattice. More significantly, we found that as-synthesized N-TiO₂ showed significantly higher catalytic activity than commercially available TiO₂ for the synthesis of a novel series of α -amino phosphonates via Kabachnik–Fields reaction under microwave irradiation conditions. The improved catalytic activity is due to the presence of strong and Bronsted acid sites on a porous nanorod surface. This work signifies N-TiO₂ is an efficient stable catalyst for the synthesis of α -aminophosphonate derivatives.

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1 Introduction

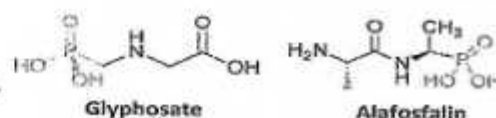
In recent years, organophosphorus compounds have received much attention due to their widespread applications in medicinal and agriculture industries.^{1,2} α -Aminophosphonates are one such biological important framework that are structural mimics of amino acids. For example, glyphosate (*N*-(phosphonomethyl)glycine) is extensively utilized in agriculture as a systemic herbicide and Alafosfalin is used as an antibacterial agent³ (Fig. 1). The bioactivity of these molecules such as antimicrobial,⁴ antioxidant,⁵ anti-inflammatory,⁶ enzyme inhibitors⁷ and antibacterial⁸ is one of the reasons for them to be of

immense interest in synthetic organic chemistry. It has been demonstrated that on incorporation of heterocycles such as thiophene,⁹ benzothiazoles,¹⁰ thiadiazoles,¹¹ and pyrazole¹² into the α -aminophosphonates scaffold, the resulting compounds exhibited interesting biological activities. Pyrazole derivatives of α -aminophosphonates have been rarely reported in the literature,^{13,14} thus synthesis of novel pyrazole derivatives of α -aminophosphonates is important to research.

Although several protocols for the synthesis of α -aminophosphonates are reported, one of the most important is the Kabachnik–Fields reaction.^{15,16} This involves a one-pot three-component coupling of a carbonyl compound, an amine and alkylphosphite. These protocols has been accomplished in presence of a variety of catalyst such as TiCl₄,¹⁷ CuI,¹⁸ hexanesulphonic sodium salt,¹⁹ trifluoroacetic acid (TFA),²⁰ In(OTf)₃,²¹ BiCl₃,²² Cu(OTf)₂,²³ SbCl₅/Al₂O₃,²⁴ InCl₃,²⁵ LiClO₄,²⁶ ZrOCl₂,²⁷ TsCl,²⁸ Mg(ClO₄)₂,²⁹ and Na₂CaP₂O₃³⁰ in presence or

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† Electronic supplementary information (ESI) available. See DOI: 10.1039/d0ra04533k

Fig. 1 Some biological active α -aminophosphonate.

Microwave-assisted Synthesis, Characterization, and Antibacterial Screening of Some Pyrazolone Derivatives

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ABSTRACT 1-(4-(4-Chlorophenyl)thiazol-2-yl)-3-propyl-1*H*-pyrazol-5(4*H*)-one **5** was prepared by the reaction of 1-(4-(4-chlorophenyl)thiazol-2-yl)hydrazine and ethyl 3-oxohexanoate. Compound **5** was condensed with different 4-formylpyrazoles **8a-f** to give product **9a-f** through Knoevenagel condensation. The reaction was carried out by both conventional and non-conventional methods. The structures of all the newly synthesized compounds were confirmed with the help of spectral techniques. All the compounds were screened for antibacterial activity. Compounds **9a**, **9d**, and **9e** exhibited good antibacterial activity against *Bacillus subtilis*.

KEYWORDS Knoevenagel condensation, Pyrazolone, Thiazoles, Thiophene.

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INTRODUCTION

The Knoevenagel condensation reaction has been widely employed for C-C bond formation in organic synthesis^[1] and their products are the key intermediates for the synthesis of various natural and therapeutic drugs, polymer, and perfumes.^[2] Lewis bases and acids have been reported as catalysts in the Knoevenagel condensation, including Ni-SiO₂,^[3] synthetic phosphate Na₂CaP₂O₇,^[4] Ca₂P₂O₇,^[5] and natural phosphate ([NP]/KF or NP/NaNO₂).^[6] Ionic liquids^[7] have been also used as catalysts in Knoevenagel condensation.

Thiazoles and their derivatives have attracted continuing interest over the years because of their varied biological activities such as anti-inflammatory,^[8] antitubercular,^[9] antimicrobial,^[10] angiogenesis,^[11] and neuroprotective.^[12] Various pyrazole derivatives exhibit anti-inflammatory,^[13] analgesic,^[12] antiproliferative,^[14] and antihepatotoxic^[15] activities.

Thiophene is sulfur-containing a five-membered heterocyclic compound. Various biological activities

associated with thiophene derivatives are BACE1 inhibitors,^[16] HIV protease inhibitor,^[17] antibreast cancer,^[18] acetylcholinesterase inhibitors,^[19] and antidepressant.^[20]

The pyrazolone skeleton exists in the core structure of several biologically active compounds and natural products.^[21] Antipyrine^[22] was the first synthetic drug containing pyrazolone ring as the main framework which has been used as an analgesic and antipyretic. Pyrazolone derivatives show a broad spectrum of biological activities such as severe acute respiratory syndrome-coronavirus 3C-like protease inhibitors,^[23] cytotoxic,^[24] antitubulin,^[24] anaplastic lymphoma kinase inhibitors,^[25] anti-inflammatory,^[26] and analgesic.^[24] Some of the chlorine-containing compounds exhibit anti-inflammatory,^[27] analgesic,^[28] antibacterial,^[29] and antifungal^[30] activities.

The application of microwave (MW) and ultrasound irradiation as a non-conventional energy source for the activation of reactions has now become a very popular and useful technology in organic chemistry.^[31-33] These methods lead to enhanced conversion rates, higher yields, and easier work-up.

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64 (10)

Development of Microcontroller Based Bluetooth Controlled System for High Power Electric Appliances

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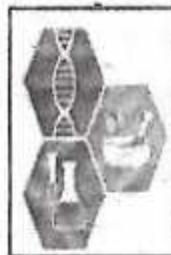
Abstract - Indeed, state of the art technology is playing significant role in the development of wireless controlled high power electric appliances for diversified application. On survey, it reveals that investigators utilized different wireless controlled technologies in hazardous and containment zones. Keeping eye on hours need, inexpensive and robust embedded system is designed deploying MCS-51 series device and Bluetooth technology to precisely control the power of electric appliances. Hence, AT89S52 microcontroller is deployed for the present prototype embedded system. This AT89S52 has low-power, high-performance CMOS 8-bit, In-System Programmable (ISP) Flash memory, etc. as promising features. The HC-06 Bluetooth sensor module is interfaced to the AT89S52. Holistically, Bluetooth technology has good performance features than IR technology, low power consumption, immune to interference, good range, easily upgradable, etc. The TRIAC driven optocoupler, MOC3021 is wired around AT89S52 to control the high power electric appliances using TRIAC BT136. The firmware is developed in embedded C, using Kiel μ Vision3, as an IDE. In this work, developed embedded system is tested through Mobile Bluetooth App and depicted in this paper.

Key Words: Bluetooth, AT89S52 microcontroller, embedded system, Optocoupler, etc.

1. INTRODUCTION

Upon industrial survey, it is observed that many high power appliances or devices are used. The people has to operate these devices manually, sometimes it becomes risky for them. Therefore safety of peoples plays very important role in various industrial sectors. If such types of high power devices are operated remotely, it becomes very safe for the operators. Therefore most of the researchers are showing more interest in designing of various embedded systems for controlling of high power devices in industrial sectors. It makes tremendous revolutionary changes in the design and development of industrial electronics embedded devices. Microcontroller based embedded systems are also widely used in the field of domestic, telecommunication, process control, industries and R&D as well [1, 2, 3]. The development of mobile operated embedded system using Bluetooth Technology becomes suitable for remote controlling of high power devices. An embedded system is one that has computer-hardware with software embedded in it as one of its most important component [4].

Using Android application user can send the commands to the Bluetooth module to control the electrical loads. The Bluetooth module receives the commands from the Android Application installed in the Mobile Phone, using wireless communication technology (Bluetooth). The software loaded in Microcontroller communicates with Bluetooth module serially to receive the commands. Microcontroller switches the electrical loads automatically based on the commands received from the Bluetooth module. Therefore, it is proposed to design and develop an embedded system for precise control of high power devices by using android mobile phone. For various dedicated applications, the high performance microcontroller based embedded systems are found most reliable. Most of the designers are designing the systems based on 8031 and 8051 microcontrollers having sufficient on chip resources. However, to develop small embedded systems, the microcontrollers from 8051 families are more suitable. The microcontrollers are becoming an integral part of engineering design known as embedded system [5]. Hence, an embedded system for controlling the high power devices is designed by using AT89S52 microcontroller and Bluetooth module HC-06 and is presented in this paper.



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Effect of juvenile hormone-III and 20-hydroxyecdysone hormone on larval development of worker and drone honeybee *Apis cerana indica* (Fabricius) (Hymenoptera: Apidae)

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DOI: <https://doi.org/10.22271/j.ento.2021.v9.i2m.8582>

Abstract

Indian honeybee *Apis cerana indica* is polymorphic bee having queen, worker and drone castes. In honeybee each caste has its own developmental pattern and completes its development passing through egg larva, pupa and adult stages. Post-embryonic development of honeybee is controlled by juvenile hormone and 20-hydroxyecdysone. Present study find out the effects of juvenile hormone-III and 20-hydroxyecdysone on development of fifth instar larvae of worker and drone honeybee *Apis cerana indica*. Pattern of effects of both hormones on weight and length of worker and drone larvae were observed similar at 24 hrs and 36 hrs time interval but prominent changes in weight and length were seen in drone larvae as compared to worker larvae. Antagonistic effect of juvenile hormone-III and 20-hydroxyecdysone on total body protein was found in worker and drone larvae. Different effects of both hormones on worker and drone larvae suggested the different development timing and differed in physiology of worker and drone castes.

Keywords: *Apis cerana indica*, juvenile hormone-III, larvae, 20- hydroxyecdysone

Introduction

Juvenile hormone play important role during caste development of honeybee, *Apis mellifera* (Wirtz and Beetsma, 1972; Wirtz 1973; Copijn *et al.*, 1979; Dietz *et al.*, 1979; Rachinsky *et al.*, 1990) [20, 21, 5, 6, 12]. Rembold *et al.*, 1974 [13] found disturbed development in juvenile hormone treated larvae of *Apis mellifera*. Asencot and Lansky (1976) [1] observed different effect of juvenile hormone with different concentration of sugar on the differentiation of worker larvae to queen. Salles and Cruz-Landim (2004) [15] found no significant effect of juvenile hormone on the morphology of mandibular gland in fifth instar larvae of worker honeybee *Apis mellifera*. Physiological effect of juvenile hormone on adult honeybee *Apis mellifera* was observed by Rachinsky *et al.*, (1990) [12]. Rutz *et al.*, (1975) [14] found that high dose of 10 µg of JH-III decreased haemolymph protein concentration, lowers the vitellogenin synthesis and degenerate the hypopharyngeal gland while low dose of 1 µg of JH-III increase the haemolymph protein concentration, vitellogenin synthesis and development of hypopharyngeal gland.

Decrease protein contents and protein patterns of mucus gland were observed by Colonella and Hartfelder (2003) [4] in adult honeybee drone *Apis mellifera* after treatment with 20-hydroxyecdysone. A stimulatory and inhibitory effect of 20-hydroxyecdysone hormone was also noticed in other insects (Shridevi *et al.*, 1990; Ismail and Dutta-Guota, 1990; Ismail and Gillot 1995; 1997) [7, 8, 9]. Nascimento *et al.*, (2003) [11] describe the inhibitory effect of 20 hydroxyecdysone and no effect of juvenile hormone on expression of transferring gene during postembryonic development of honeybee *Apis mellifera*.

Apis cerana indica is highly domesticated honeybee in India for commercial and pollination purpose. It is polymorphic bee having queen, worker and drone castes. Each caste has its own developmental pattern. Therefore the present study is focused on to study the effects of juvenile hormone-III (JH-III) and 20-hydroxyecdysone (20-HE) on development of fifth instar larvae of worker and drone caste. All statistics presented in this paper is mean ± of standard errors. Students "t" test was made use for testing the significance of difference between the

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HISTOMORPHOLOGICAL STUDY OF CEPHALIC NEUROENDOCRINE SYSTEM DURING PUPAL METAMORPHOSIS IN INDIAN WORKER HONEYBEE APIS CERANA INDICA(F.) (HYMENOPTERA: APIDAE)

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ABSTRACT

Honeybee, *Apis cerana indica* undergoes complete metamorphosis and each stage of development has its own importance. Developmental changes occurs in body structure during metamorphosis are under the control of hormone secreted by neuroendocrine organ. During metamorphosis brain and retrocerebral complex of red eye pupa of *Apis cerana indicaworker* was studied histologically. Four neurosecretory cell groups with different type of neurosecretory cells were observed in various regions of the red eye pupa brain of worker honeybee. Retrocerebral complex constituting corpora cardiaca and corpora allata loaded with neurosecretory materials. The structure of neurosecretory cells and their number in various region of brain were found unique with different staining properties by using Chrome alum Haematoxylin-Phloxine (CHP) stain.

Keywords: *Apis cerana indica*, Brain, Honeybee, Neurosecretory cell, Pupa.

Introduction

Snodgrass (1956) described the anatomical organisation of central and sympathetic nervous system in hymenoptera. Hymenopteran insects complete their development by passing through egg, larva, pupa, and adult developmental stages. During post embryonic development, several neurons in brain formed, degenerated and replaced to perform specific task and memory (Tissot and Stokes 2000; Zarset. al., 2000).

Weyer in 1935 described the cephalic neuroendocrine system in *Apis mellifera*. Scharrer in 1937 noticed the median neurosecretory cells (MNC) groups while, the lateral neurosecretory cells (LNC) groups in insects brain was observed by other workers (Cazal, 1948; L'Helias, 1950; L'Hoste, 1952; Gawande, 1968). The ventral(tritocerebralis) neurosecretory cell (VNC) groups noted by Ritcey and, Dixon (1969) and the optic neurosecretory cell (ONC) groups by Prasad (1981). Post embryonic brain and mushroom body development were studied by Malun (1998) and Farris et al. (1999) by using histological technique.

Apis cerana indica is highly domesticated honeybee in India due to its high pollination efficiency and for apiary byproducts production. Like other hymenopteran insects *Apis cerana indica* complete its development by passing through all four developmental stages. Pupal stage in honeybee is characterised

by development of eye and eye colour patterns. Eye colour patterns changes from white to brown to red-black eye during pupa to adult metamorphosis. On that basis honeybeepupa is classified into white eye pupa(early pupa), brown eye pupa (mid pupa) and red- black eye pupa (Late pupa). In the present work detailed study of neurosecretory cells in brain and retrocerebral complex in red eye pupa of worker honeybee *Apis cerana indicawere* carried out during pupa to adult metamorphosis.

Materials and methods

Red eye pupae of worker honeybee *Apis cerana indica* were separated from colony and reared in home apiary situated in Warora district Chandrapaur, Maharashtra, India (20°16'53"N79°01'21"E). Brain along with retrocerebral complex of red eye pupa was dissected out from worker body in insect saline solution and preserve in bouin's fixative for overnight. In some cases head portion along with first thoracic segment were cut from body of red eye pupa of worker and preserve in bouin's fixative for overnight. Thereafter, tissues were dehydrated in alcohol grades, cleared in xylene and embedded in paraffin wax (58-60⁰ C). Serial sections were cut at 4-5 micron thickness and stained with Chrome Alum Haematoxylin-Phloxine (CHP) stain. Staining procedure (Bergman's Chrome alum Haematoxylin Phloxine, Pearce, 1968).

10/10/20
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“A Study of Financial Management of Sugarcane Harvesters in Selected Villages with Special Reference to Man Taluka”

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Introduction :

In a developing agricultural democracy like India, the number of unorganized workers is on the rise. Workers and industry have a very close relationship. After 1991, the wave of globalization in India led to the emergence of new industries, but the exploitation of low-wage workers increased. A worker who works for a low wage avoids taking advantage of the opportunity by accepting the next opportunity because he cannot get the opportunity that comes with education. Therefore, in the current situation, such workers have to return home as there is no job security. If the worker is not sure of the job or work, the worker may be deprived. Only those who have job security can truly support us, not otherwise. For years, every year those who do not have enough employment have to be satisfied with the work they get. In the same way, sugarcane workers have to go around the factory every year before starting the factory. Once the factory is started, the designated officers of the factory allow the workers to cut the cane till the end of the day and the workers start their weeding work. The worker cuts the cane in each season until the lifting of the Supervisor is repaid. The worker who goes to cut the cane gets up early in the morning and goes by whatever means he can to cut the cane, most of the time he walks.

Review of Literature and Theoretical Background:

The worker walks towards the factory every season to satisfy his hunger. Workers have to face many. There are many problems faced by the sugarcane workers such as financial extortion from the workers, unaccounted for work, treating the workers as per their whims and fancies, working underpaid and so on. Sugarcane workers are an important factor in starting a factory. But the workers have to be deprived of the benefits of fair wages and other financial surpluses. Every year the workers go to the factory to cut down the sugarcane as their livelihood but the factory takes advantage of the fact that they come as they have no choice. Sugarcane is used as a raw material for sugar mills. Due to the new mechanization, the work that is available to the workers is not available in the coming modern times. Mechanization has created less employment for the workers. If the work is not available to the workers on time, their livelihood will be in question. Sugarcane workers are an important

Web Presence Goals and its Contribution in Digital Marketing

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Abstract :

With the emergence of internet and its associated technology – enabled, screen-to-face interfaces (e.g. mobile phones, interactive television), a new era of marketing has emerged . Well treasured academics and practitioners have called for new rules and urged debate about fundamental tenets of marketing, including segmentation, mass marketing and regionalized programs . At the other extreme , pandits and academicians alike have argued that both the basic building blocks of marketing approach and pathways to competitive advantage have remained the same .

Key Words : Traditional – Digital Marketing , Web Presence , Goal Setting , E business Process

Introduction:-

The mission of marketing is to attract and retain customers . to accomplish this goal, a traditional bricks –and mortar marketer uses of variety of marketing variables including pricing , advertising, and channel choice – to satisfy current and new customers . in this context , the standard marketing –mix toolkit includes such mass – market ing levers as television advertising , direct mail and public relation as well as customer specific marketing techniques such as the use of sales reps .

The approach taken in current volume falls between these polar views . That is new levels have been added to the marketing mix , segments have been narrowed to finger graduations, consumer expectations about convenience have forever been alerted and competitive responses happen in real time . in short , these are new exiting changes that have profound impact on the practice of marketing . at the same time , some of the fundamentals of business strategy – seeking competitive advantage based on the superior value , building unique resources and positioning in the minds of customer-have remained the Same .

The intent of this text is to provide a clear indication of what has changed and what has not changed. At the same time, the text would not to be complete (and indeed might be actionable from the standpoint of business practice) if it did not propose a border framework to understanding the exercise of E-marketing frameworks such as the 4Ps of marketing or the five forces of competitive analysis are important because they provide esay –to –remember, simplifying structure for composite problems . They also serve as guides to

Marketing Atomization Trough Digitalization

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a. Abstract :

With the emergence of internet and its associated technology – enabled, screen-to-face interfaces (e.g. mobile phones, interactive television), a new era of marketing has emerged . Well treasured academics and practitioners have called for new rules and urged debate about fundamental tenets of marketing, including segmentation, mass marketing and regionalized programs . At the other extreme, pundits and academicians alike have argued that both the basic building blocks of marketing approach and pathways to competitive advantage have remained the same.

b. Key Words: -Traditional -Digital Marketing, Marketing Atomization, E - CRM

c. Introduction: -

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An Opportunity for Radical Change in Indian Agriculture

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Abstract:

There has been a need for radical change in Indian agriculture in the 21st century, and chemical farming is going outdated gradually. Farmers' financial condition will not be improved and their labour cost will not be a fair until the huge savings take place in production costs. Demanding prices based on the production costs is a practice of keeping farmers in poverty forever. The prices are not based on production cost anywhere. Prices are solely decided on the basis of demand and supply. For the sake of subsistence in the global competition, the product quality will have to be improved by reducing the cost of production and prices based on it. Today, the needs of poison-free food are felt by the citizens of rich countries. Indian farmers can produce the goods as they expect, but for that, farmers need to change their farming practices, which is an opportunity in the 21st century.

Keywords: agriculture, chemical farming, production costs, poverty, opportunity

1. Introduction:

It was assumed that after independence, Indian farmers' poverty will be no more but it was in vain. Many government schemes did not help farmers for improving their economical status but it is observed that those schemes lead them to burry in the poverty. They were forced to use technology for production by importing technology from outside the country. Emphasis was given for using of non-essential chemicals. In the name of the Green Revolution, India's agriculture and livelihoods was destroyed in order to run new companies which resulted the peasantry began to use various chemical fertilizers and pesticides to increase agricultural production. Due to this poisonous material, the land has become infertile and today the farmers have been unable to get any produce from these infertile land that caused farmers are caught into debt. Many farmers have no choice but to commit suicide. This is the current status of farmers.

21. Digital India Opportunity in Covid-19 and beyond

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Introduction

We are fighting with the pandemic disease such as COVID-19 from post few months .As it is spreading fast we are affecting externally as well as internally. We had facing many national issues like protests, violence, crimes, political issues and many more.

This pandemic disease COVID-19 is spreading badly to affect our Health and economy. Other than this problem our country is facing natural calamities like, cyclones, heavy rains untimely rains which cause destruction of crops.

This problem gives serious trouble to the internally displaced population as well as migrant's .Social distancing reduced domestic activity. Stalled economic activities are facing more informal, and in those with low skilled worker.

On other hand not only this but our neighbouring countries gives us security tension which leads us to face socio political trouble, downturn aggravating economy and more important it increased human challenges.

This challenge gives a real leader and who stands and becomes visible. The leader has ability to stand bold, confident and courageous in such critical and drastic condition. They accept challenges, stay focused steady. They lead us to give positive approach to crisis and hopes.

When our country is facing such severe and unwanted situations our visionary prime Minister Shree Narendra Modiji comes forward and gives a call to the nation for self reliance and making India more self reliant in post COVID-19 disease situation.

With the help of reliance our prime Minister focused to strengthen India cottage and Home industries (SMEs). For "Atma-Nirbhar Bharat" our beloved Prime Minister announces package of '20 lakh crore rupees '.

Resilience, equity and efficiency policies will be promoting but it doesn't mean that self-reliant is isolating away from the world.

Objectives of the paper

1. To Study the Concept of Self Reliant India.


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२९: आत्मनिर्भर भारत, वस्तुस्थिती, संधी आणि आव्हाने

प्रा. डॉ. सीमा चव्हाण

सहाय्यक प्राध्यापिका, अण्णासाहेब आवटे महाविद्यालय, मंचर, जि. पुणे.

विकास गोधाजी अंत्रे

संशोधन विद्यार्थी, रा. ब. बोरवके श्रीरामपूर, जि. अहमदनगर.

प्रस्तावना

देशाचे प्रधानमंत्री नरेंद्र मोदी यांनी आत्मनिर्भर भारत हे अभियान पाच वर्षांपूर्वी हाती घेतलंय. आत्मनिर्भर भारत याचा अर्थ खरा सगळ्यांनी समजून घ्यायला हवा. आत्म निर्भर म्हणजे आपला भारत देश पूर्णपणे स्वतःच्या बळावर उभा राहू शकतो अशी ताकद भारताला बनवणे. आत्मनिर्भरता आर्थिक संदर्भात म्हणजे संकुचितता, सुरक्षितता, सदैव स्वदेशी, जागतिकीकरणकडे पाठ फिरवणे याला मी सध्याच्या युगात आत्मनिर्भर म्हणणार नाही. आत्मनिर्भर म्हणजे जिथे जिथे आपण इतर देशांवर अवलंबून आहोत, मग ते आयातीसाठी असो, परदेशी गुंतवणुकीसाठी असो, त्याच्यावर अवलंबून असतानाही आपण आपले उद्योग, आपल्या सेवा अधिकाधिक कार्यक्षम आणि जागतिक दर्जाच्या करणं, याला मी आत्मनिर्भर म्हणतो. जगात असा एकही देश आढळणार नाही, ज्याची आर्थिक समृद्धी आणि श्रीमंती हे फक्त त्याच देशातील उद्योगांना प्रमोट करून झाली आहे. थोडक्यात आत्मनिर्भरता म्हणजे देशांतील साधनांचा पुरेपूर वापर करून घेणे हा आहे. यात परदेशी सहाय्य नको ही भूमिका नसून, सरसकट परदेशी मालावर अवलंबित्व नको ही भूमिका आहे. जागतिक पातळीवर एकमेकांच्या सहकार्याने धोरण निश्चिती करून सगळ्याच देशांनी आपापले भले करून घ्यावे आणि एकमेकांच्या हिताला जाणीवपूर्वक बाधा न पोहचवता आपले हितसंबंध सुट्ट करवावेत, अशी जागतिकीकरणाची व्यवस्था मागील शतकात रूढ झाली. पण एकविसाव्या शतकामध्ये त्यात काही महत्त्वाचे बदल होत आहेत. जगभर स्वतःच्या देशापुरता विचार करणारी नवी विचारधारा बलवत्तर होऊ लागली आहे. ती लक्षात घेता अन्नधान्य उत्पादनाच्या बाबतीत आपण पूर्वीच आत्मनिर्भर झालो आहोत, पण ऊर्जा, पाणी, संरक्षण उत्पादन, तंत्रज्ञान, औषधनिर्माण... अशा अनेक क्षेत्रात आपण आणखी आत्मनिर्भर होण्याची गरज आहे. त्यासाठी स-कुशल मनुष्यबळ निर्माण करावे लागेल. आत्मनिर्भर अभियान सुरु करून आता पाच वर्षे होत आली. त्यात कोविडमुळे झालेल्या लॉकडाऊनमुळे अर्थव्यवस्थेची मोठी पडझड झाली. कोविडच्या धक्क्यातून भारत सावरत नाही, तोच चीनने आपल्या भूभागावर केलेल्या अतिक्रमणामुळे नवे आंतरराष्ट्रीय संकट निर्माण झाले. या सर्व परिस्थितीत भारताला आत्मनिर्भर होण्याशिवाय पर्याय नाही. देशाला आत्मनिर्भरता प्राप्त करण्यासाठी काय अडचणी आहेत, त्या कशा सोडविता येतील, या दृष्टीने आत्मनिर्भर भारत, वस्तुस्थिती, संधी आणि आव्हाने, या रिसर्च पेपरच्या माध्यमातून अडचणी मांडून त्यावर उपाय

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अर्थशास्त्र विभाग, रयत शिदाण संस्थेचे, एस.एच.जी.एम.कॉलेज, कोपरगाव

गोपवारा -

शाश्वत विकास हि संकल्पना काळाची गरज आहे. शाश्वत विकास यास 'टिकाऊ विकास', 'चिरकालीन विकास' असेही संबोधले जाते. शेती, पर्यटन, पाणी, शहरे, मृदा इ. संवर्धनासाठी शाश्वत विकास काळाची गरजच आहे. राज्य, राष्ट्रीय व आंतरराष्ट्रीय स्तरावर शाश्वत विकास हि संकल्पना सर्वात महत्त्वाची संकल्पना ठरत आहे. शाश्वत विकास या संकल्पनेच्या माध्यमातून वर्तमान पिढ्यां बरोबरच भविष्यातील पिढ्यांचा विचार केला जातो. संपूर्ण मानवजातीच्या कल्याणासाठी, नैसर्गिक साधनसामग्रीच्या संवर्धनासाठी व पशु-पक्षी-जल-मृदा संवर्धनासाठी शाश्वत विकास हि संकल्पना महत्त्वाची भूमिका निभावत आहे.

प्रस्तावना -

शाश्वत विकास म्हणजे असा विकास जो भविष्यकालीन पिढ्यांची स्वतःच्या गरजा भागविण्याची क्षमता धोक्यात न आणता वर्तमानातील गरजा भागवू शकतो. शाश्वत विकासाची संकल्पना केवळ पर्यावरणाशी संबंधित नाही. नष्ट होत जाणारी संसाधने व वेगाने होणारा पर्यावरण हासातून ही संकल्पना निर्माण झाली. दिवसेंदिवस शाश्वत विकास या संकल्पनेचे महत्व वाढत जातच आहे तसेच व्याप्तीसुद्धा वाढत आहे. शाश्वत विकास या संकल्पनेत दारिद्र्य निर्मुलन, चांगले आरोग्य, गुणवत्तापूर्ण शिक्षण, स्वच्छ पाणी, हरीत उर्जा (सौर, पवन, जैव) शाश्वत शहरे, वातावरण बदल व जमिनीवरील जीवन सुरक्षा इत्यादी घटक समाविष्ट होतात. शाश्वत विकास हि संकल्पना प्रभावीपणे राबविली तर निश्चितच नैसर्गिक संसाधने, पर्यावरण यांचे संरक्षण होऊन सर्व समाजाचे कल्याणहित साध्य होईल.

शाश्वत विकास या संकल्पनेचे महत्व -

मानवी गरजा अमर्यादीत आहेत परंतु अमर्यादीत मानवी गरजा पूर्ण करण्यासाठी संसाधने दुर्मीळ व मर्यादित आहेत. दुर्मीळ मर्यादीत संसाधने यांचे संवर्धन करून भविष्यकाळातील पिढ्यांचे संवर्धन करणे यासाठी शाश्वत विकास अत्यंत महत्त्वाचा आहे. शाश्वत विकासामध्ये आपण मनुष्याच्या विकासासाठी निरुत्पन्नांचा अशाप्रकारे वापर केला पाहिजे की निसर्गाने पर्यावरणाला हानी पोहचू नये आणि निसर्ग विकासामध्ये संतुलन राहील. शाश्वत विकास हा एक आर्थिक व सामाजिक विकास आहे. शाश्वत विकासामुळे पर्यावरणाचे संरक्षण व संवर्धन होते. शाश्वत विकासाच्या माध्यमातून दुर्मीळ व महत्त्वाच्या साधनसंपत्तीचा फाटकसरतीने वापर होताना दिसून येत आहे. आर्थिक विकास, सामाजिक विकास व पर्यावरण संरक्षण यामध्ये शाश्वत विकास संकल्पनेस महत्व आहे.

अभ्यास विषयाची उद्दिष्ट्ये -

1. शाश्वत विकास संकल्पनेचा अभ्यास करणे. 2. शाश्वत विकास या संकल्पनेचे महत्व पटवून देणे. 3. शाश्वत विकासाच्या माध्यमातून पर्यावरण संवर्धन करणे.

अभ्यास विषयाची गृहीतके -

1. पर्यावरण संवर्धनात शाश्वत विकास या संकल्पनेचे महत्व. 2. शाश्वत विकास हि संकल्पना आर्थिक व सामाजिक विकासात महत्त्वाची भूमिका निभावत आहे. 3. शाश्वत विकासांमुळे दुर्मीळ संसाधने संवर्धित होत आहेत.

संशोधन पध्दती -

प्रस्तुत शोधनिबंध हा द्वितीय साधन सामग्रीवर आधारित आहे. वर्तमानपत्रे, मासिके, संदर्भग्रंथ व शाश्वत विकासासंबंधीचे शासकीय अहवाल या द्वितीय साधनसामग्रीवर हा शोधनिबंध आधारित आहे.

त्याचप्रमाणे इतर आवश्यक त्या घटकांमधील माहिती संकलित करून निष्कर्ष काढण्यात आलेले आहेत.

अभ्यास घटकांचे विश्लेषण -

शाश्वत विकास या संकल्पनेचा उगम १९६० च्या दशकात झालेला आहे. शाश्वत विकास हा शब्दप्रयोग सर्वप्रथम जागतिक संवर्धन ठावपेचमध्ये करण्यात आला. नैसर्गिक संसाधने मर्यादीत असतात त्यामुळे ती संपण्याचा धोका असतो. उत्पादन प्रक्रीचेत पर्यावरणाची हानी होत असते. प्रदूषित पर्यावरणामुळे विकास थांबतो. शाश्वत विकास या संकल्पनेचे विश्लेषण पुढील घटकांद्वारे करता येते.

१) वसुंधरा परीषद १९९२ -

पर्यावरण संवर्धनासाठी व शाश्वत विकासासाठी संयुक्त राष्ट्रांच्या संयुक्त राष्ट्र पर्यावरण व विकास परिषदेने १९९२ मध्ये ब्राझील (रिओ-ड-जानेरो) येथे वसुंधरा परीषद भरवली. या वसुंधरा परिषदेने शाश्वत विकास हि संकल्पना सर्वप्रथम स्वीकारून महत्व पटवून दिले.

२) शाश्वत विकासाचा आधार -

वाहतूक आणि व्यापार विकास रणनीती

प्रा. बामूल बाव. के.

अर्थशास्त्र विभाग, रयत शिक्षण संस्थेचे, एस.एस.जी.एम.कॉलेज.कोपरगाव

गोपवारा -

एखाद्या देशाची वाहतूक व्यवस्था बऱ्याच कारणाने आर्थिक वाढीमध्ये अविभाज्य भूमिका बजावते. कच्चा माल, पंचसामग्री, तयार वस्तू इत्यादींच्या द्रुत आणि सुलभ हालचालीमुळे त्याचा फायदा उद्योगांना होतो. वाहतूक व्यवस्थेचे जाले जेव्हादे मोठे आणि सशक्त असेल तेव्हाही वाहतूक सुकर बनत असते. उदा. भारतीय अर्थव्यवस्था पुढील १५ वर्षांत जर ८ ते ९% दराने व्यापाराची वाढ होण्याची आवश्यकता आहे, भारतातील वाहतूक व्यवस्था आणि आर्थिक विकास चांगली वाहतूक व्यवस्था वस्तूसाठी बाजारपेठ विस्तृत करू शकते. त्यामुळे उत्पादनाच्या ठिकाणी कच्चा माल, इंधन, उपकरणे इत्यादींची हालचाल सुलभ होऊ शकते. पुढे हे दुर्गम भाग तसेच उत्पादनासाठी संसाधने उपदेख. तसेच वाहतूकीची सुविधा वाढत असताना मोटार वाहने, इंजिन, जहाजे इत्यादींची मागणी वाढते.

प्रस्तावना -

वाहतूक या शब्दाची उत्पत्ती Transporate या लॅटीन शब्दापासून झालेली आहे. 'Trans' म्हणजे Across (ओलांडून किंवा पलीकडे) आणि Portare म्हणजे Carry (वाहून नेणे) म्हणजे वाहतूक या शब्दाचा अर्थ एका ठिकाणाहून दुसऱ्या ठिकाणी वाहून नेणे. वाहतूकीच्या या क्रियेमध्ये वस्तू, सेवा तसेच मानवी श्रम एका ठिकाणाहून दुसऱ्या ठिकाणी घेऊन जाणे अभिप्रेत आहे. वस्तू किंवा व्यक्ती एका ठिकाणाहून दुसऱ्याकडे वाहून नेणे म्हणजे वाहतूक. वाहतूक आणि दळणवळण हा मानवाचा प्राचीन काळापासून प्रचलित असलेला तृतीय श्रेणीचा व्यवसाय मानला जातो. देशाच्या आर्थिक आणि औद्योगिक विकासात वाहतूक साधनांना अतिशय महत्त्वाचे स्थान आहे.

वाहतूक आणि व्यापार या संकल्पनेचे महत्त्व -

कोणत्याही प्रदेशाच्या आर्थिक विकासात वाहतूक व्यवस्था ही अत्यंत महत्त्वाची क्रिया असते. प्रगत आणि परिणामकारक वाहतूक आर्थिक प्रगतीचा पाया ठरत असते. जवळचे लोहमार्गचे जाले निर्माण झाल्यामुळे आर्थिक विकासाचा वेग वाढला आहे. वाहतूक व्यवस्थेचे महत्त्व खालील मुद्द्यांच्या आधारे स्पष्ट करता येते.

- 1) वाहतूक व्यवस्थेमुळे फास - उपयोगिता वाढते.
- 2) वाहतूक व्यवस्थेमुळे स्थल - उपयोगिता वाढते.
- 3) वाहतूक व्यवस्थेमुळे वस्तूच्या उपयोगितेमध्ये वाढ घडून येते
- 4) प्रादेशिक विकास घडून येण्यास वाहतूक घटक मदत करतो.
- 5) मानवी जीवनस्तर आणि राहणीमान सुधारण्यास मदत करते.
- 6) प्रादेशिक संरक्षण व राष्ट्रीय एकता वाढीस लागते.
- 7) अंतर्गत व आंतरराष्ट्रीय व्यापारातील वाढ होते.

आर्थिक विकास, सामाजिक विकास व पर्यावरण संरक्षण यामध्ये वाहतूक विकास संकल्पनेस महत्त्व आहे.

अभ्यास विषयाची उद्दिष्टे -

- 1) वाहतूक व व्यापार विकास संकल्पनेचा अभ्यास करणे.
- 2) वाहतूक व व्यापार विकास या संकल्पनेचे महत्त्व पटवून देणे.
- 3) वाहतूक व व्यापार विकास माध्यमातून पर्यावरण संवर्धन करणे.

अभ्यास विषयाची गृहीतके -

- 1) पर्यावरण संवर्धनात वाहतूक व व्यापार विकास या संकल्पनेचे महत्त्व.
- 2) वाहतूक व व्यापार विकास ही संकल्पना आर्थिक व सामाजिक विकासात महत्त्वाची भूमिका निभावत आहे.
- 3) वाहतूक व व्यापार विकासामुळे दुर्मीळ संसाधने संबंधित होत आहेत.

संशोधन पध्दती -



Black African-American Autobiographies: Constructing 'Self'

Dr. Madhav Radhakisan Yeshwant

ABSTRACT

Autobiography, a political act, historically investigates the protagonist's ethnicity, language, gender, religion, class and caste. It underlines author's urge to construct 'self'. The Black African-Americans invented racism and its various aspects to construct their 'self' which is reflected in autobiographies of Malcom X, Ralph Ellison, James Baldwin and Maya Angelou. The White Americans have brought the Black Africans to America in the 17th century. They were sold and purchased as slaves to exploit their physical strength. They were detached from their identity. Subsequently, the Black people gathered at Harlem, Chicago, California and New York and established 'The Black Panther Movement'. The Black people revolt against religious hegemony, law, social structure suitable for the White Americans only. Thus, they assert their 'self'. These four autobiographies are the representative examples of Black people's social trajectory in America. The Black literature was studied and idealised by the Dalit scholars in Maharashtra in 1970s.

Key Words: Autobiography, slave, Blacks, Africa, America, identity, self

INTRODUCTION

The assertion of identity flourished prominently in various forms of autobiographical literature i.e. poems, short stories and full-fledged autobiographies from latter part of 20th century. Autobiography is a historical document which always remains a source of historical investigation. It is the author's testimony where s/he justifies life story as subaltern experience. The protagonist selects certain events from her/his memory to reveal her/his personality, psychological growth and for constructive argument of 'self'. Thus, it is a political act which deals with ethnicity, language, gender, religion, class and caste. In short, autobiography underlines author's urge who belonged to different communities and nations to construct 'self'.

In this paper I would like to argue how the Black African-Americans invented racism and its various aspects to construct their 'self'. The autobiographies of Malcom X, Ralph Ellison, James Baldwin and Maya Angelou represent the Blacks' exploitation by the White Americans at historical, social, political and economic levels. Malcom X's *The Autobiography of Malcolm X (1965)*¹ deals with Black people's anxiety in predominantly White America. Ralph Ellison's *Invisible Man (1952)*² explores White Americans' prejudice towards Black people as well as how Black people are looking at 'Black Nationalism'. James Baldwin's *Go Tell It on the Mountain (1953)*³ focuses Christian Church and its religious hypocrisy for the spiritual upliftment of Black people. Maya Angelou's *I Know Why the Caged Bird Sings (1969)*⁴ proclaims Black woman's existence.

Rootlessness:

The above authors represent the third generation of the Black African people who were captured by the White Americans in Africa.

We're not Americans, we're Africans who happen to be in America. We were kidnapped and brought here against our will from Africa. We didn't land on Plymouth Rock – that rock landed on us.⁵

¹ https://en.wikipedia.org/wiki/The_Autobiography_of_Malcolm_X

² [https://en.wikipedia.org/wiki/Invisible_Man_\(Ellison\)](https://en.wikipedia.org/wiki/Invisible_Man_(Ellison))

³ [https://en.wikipedia.org/wiki/Go_Tell_It_on_the_Mountain_\(novel\)](https://en.wikipedia.org/wiki/Go_Tell_It_on_the_Mountain_(novel))

⁴ Martin Luther King Jr. named her the Northern coordinator of the Southern Christian Leadership Conference

⁵ https://en.wikipedia.org/wiki/I_Know_Why_the_Caged_Bird_Sings

⁶ <https://www.keepinspiring.me/malcolm-x-quotes/>

BAHINABAI AND HER 'NATURE'

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Abstract:

The environmental degradation assumes humans' savage attack on it as well as cultural development as a threat to nature. However, Indian culture has been always passionate towards nature and its environment. The vernacular literature in India contains many evidences where the human life is considered as one of the phenomenon of nature. Nature plays a role of character in Kalidas' *Meghadutam*. Similarly, Marathi poets like Saint Dnyaneshwar, Savata Mali, Janabai, Saint Tukaram and many others have elaborated their various experiences of omnipresence of God through nature. They have established a kind of fraternity with trees, animals, beasts and every phenomenon of nature. Such perspective has influenced the common life of people from Maharashtra. Bahinabai was a common woman, who was born and brought up in this milieu. She notices God's omnipresence in different shapes, sizes and the forms of nature. She represents rural Indians who always adorn, preserve and cherish the company of nature.

Index Terms: Environment, Nature, Bahinabai, Poems, Marathi Literature, Farming, Pantheism

Introduction:

The authors like Amitav Ghosh lament about the absence of collective efforts to stall environmental degradation and argue human apathy and "after me the deluge" attitude; they share massive responsibility towards sustenance of environment. When it has been argued that 'Human indifference has yielded the environmental crises to the acute dimension', it has been presumed that human beings have savagely attacked the environment rather their cultural development has always been aggressive towards nature. However, culture, developed in association with geography always influenced the inhabitants' perspective for environment.

Particularly, Indian life style has always contributed the protection of environment. The cultural diversity in India has always been passionate for nature. The cultural practices have been associated with nature and illustrated how man can live in company of nature. The Indian vernacular literature contains many evidences where human life is considered as one of the phenomena of nature. Nature plays a role of a character in the common activities in an ordinary man's life. Kalidas¹ in his *Meghadutam* personifies a cloud as a messenger. In this epic, the banished hero requests a cloud to travel across the country as per geographical root of the wind and meet his beloved to describe his pathetic condition. Kalidas has taken every opportunity to describe the vivid nature across India by using ample examples of simile, metaphor and what not. Similarly, the literature in Marathi is no exception in the treatment of nature. Saint Dnyaneshwar², the 13th century Marathi poet, while trans-creating Bhagwat Gita, has used various images in nature. Besides it, he advocates the peace from the environment for the mental equilibrium of man. Subsequently, he asks to conserve all the natural entities with certain logical arguments. All other poets in his tradition like-Savata Mali³, Janabai, Saint Tukaram⁴ -have elaborated their various experiences of God's omnipresence through nature. They have established a kind of fraternity with trees, animals, beasts and every phenomenon of nature. Such perspective has influenced the life of common people from Maharashtra. Bahinabai⁵ was a farmer woman, who was born and brought up in this milieu. She notices God-the almighty's presence in every aspect of nature, much similar to Wordsworth's pantheism. She experiences His favour throughout her life in different shapes, sizes and expressions of nature.

In this research paper, I would like to argue with an example of Bahinabai that how nature is loved, respected and adorned by common illiterate women in Maharashtra. In the early phase of her life, Bahinabai's poetic

¹ a 5th century poet in the Court of Harshwardhan

² Saint Dnyaneshwar belonged to Varkari sect, devoted to God Vitthal, a central deity of this sect.

³ Saint Savata Mali, an ardent devotee of God Vitthal, argued to sense Vitthal through natural entities like farm, crops, well etc.

⁴ Saint Tukaram, 17th Century saint, claims his intimacy with trees, birds and animals.

⁵ The first woman poet in Rural Marathi Literature

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From Untouchables to Dalits

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Abstract

Untouchables were deprived from social privileges, economic progress and political participation in the traditional village set up. Moreover, the Karma Philosophy diverted them from any kind of rationale. Thus, the untouchables had accepted defeat of their body. Consequently, all their revolts up to 19th century were subsided rather turned radical in religious rituals. Unlike the Brahmins, they had neither political interest nor ideological base of social emancipation in British India. Social reformers came out with different arguments, literature as well as solid actions against dehumanized condition of the untouchables. Dr. B.R. Ambedkar paved the way to untouchables to be the proud Dalit in Independent India. The Dalit autobiographies deal with how the untouchables replaced majority's cultural structures with virtuous life, selfless services and spotless sacrifices. The Dalit autobiographies deal with the process of 'Becoming Dalit'. This process is similar to Gilles Deleuze's theory of 'Becoming'.

Key Words :- Untouchables, Ambedkar, Autobiography, Becoming, Deleuze

Traditionally, a village was typically based on *Karu* and *Naru* i.e. *Alutedar* and *balutedar* castes in Maharashtra. (Kathare, 2008, p. 238) In this age old set up, certain castes had social, cultural, economic and political privileges whereas untouchable castes were deprived from all these advantages who were dwelling on east side out of a village. (Aleksander, 1991, p. 23) The untouchable castes- *Chambhar*, *Dhor*, *Mahar*, and *Mang* had to clean the village from every kind of dirt. They had to settle down unclaimed dead bodies/carcasses by the orders of the Headman. Such impure work assured them stale food, shroud in return to their services. Besides, their impurity was indicated through different signs and symbols. They had to wear a black thread around their neck or wrist. The untouchable women had to wear iron or

copper ornaments and saris in typical style. They had to walk on road during afternoon when shadows were at feet. It could save other to be polluted by their shadows. They had to sit down when upper caste persons were crossing them so that their shadows would not pollute the latter. (Khanolkar, 1971, p. 144) They could not spit on the ground so they had to tie earthen spittoons around their neck to spit in, and tight thorny bush around their waists to sweep off their footprints on the road. (Deshmukh, 1973, p. 182) There were unwritten rules to greet, to stand, to walk, to speak and to respect caste hegemony. In short, the untouchables were restricted from social privileges, economic progress and political participation besides projecting them culturally savage. Moreover, the Karma Philosophy diverted them from any kind of rationale. According



राष्ट्र निर्माण में डॉ.बी.आर.अंबेडकर का योगदान

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मोबाईल-९५१८७४७१९५ ९९४२३२०२६०३

• सारांश (Abstract):-

डॉ.बी.आर.अंबेडकर की राष्ट्रभक्ति अनन्यसाधारण रही है, उन्होंने राष्ट्रहित के बजाय कोई कार्य नहीं किया अर्थात् उनके कार्य की प्राथमिकता राष्ट्रवाद ही है। यह भी सत्य है कि उन्होंने अति राष्ट्रवाद को नकार है। सामाजिक एकता तथा राष्ट्रप्रेम ही राष्ट्रविकास की बुनियाद होती है जो डॉ.बी.आर.अंबेडकर के व्यक्तित्व कृतित्व में है। उनका हर आंदोलन तथा सामाजिक कार्य इस बात का प्रमाण रहा है। उनका राष्ट्रप्रेम वर्णनातीत है, फिर भी उन पर लिखने का प्रयास है।

• शब्द संकेत (Key Words):-

राष्ट्र में स्वातंत्र्य—बंधुता एवं न्याय की भावना ही 'हम सब एक है' का बोध देती है जो सशक्त राष्ट्र की पहचान है।

• प्रस्तावना:-

भारतियों को आत्मसम्मान के साथ जीने का रास्ता दिखाने वाले महात्मा ज्योतिराव फुले, राजर्षि शाहू महाराज के साथ ही डॉ.बी.आर.अंबेडकर का जरूर नामोल्लेख इसलिए किया जाता है कि डॉ.भीमराव रामजी अंबेडकर केवल व्यक्ति का नाम नहीं बल्कि वह एक शाश्वत विकास रूपी विचार है। डॉ.बाबासाहेब अंबेडकर ने देशभक्ति के अनुरूप राष्ट्र निर्माण में बहुत बड़ा योगदान दिया। इसलिए वे महामानव के साथ ही एक श्रेष्ठ राष्ट्रपुरुष, आधुनिक भारत के शिल्पकार, मानव स्वतंत्रता का युगपुरुष, उपेक्षित समाज का सशक्तिकरण करने वाला समाज परिवर्तन का मसीहा, बहुमुखी प्रतिभा के धनी एवं दलित उद्धारक रहे हैं जिन्होंने राष्ट्र निर्माण तथा विकास में मौलिक योगदान दिया है। इस बात के विवेचन में निम्नांकित मुद्दों का आधार किया गया है।

१. राष्ट्र तथा राष्ट्रप्रेम से तात्पर्य.
२. शिक्षा में योगदान.
३. आर्थिक विचार में योगदान.
४. स्त्री सुधार में योगदान.
५. अछूतोंद्वारा.
६. आदर्श लेखक.
७. बहुआयामी पत्रकार.
८. राजनीतिज्ञ.
९. संवेदनशील नेता.
१०. क्रांतिकारी व्यक्तित्व.



हिंदी तथा मराठी दलित नाटकों की चेतनागत भाषा

डॉ. राजाराम कानडे,
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मोबाईल-९५१८७४७९९५ ७९४२३२०२६०३

• सारांश (Abstract):-

इक्कीसवीं शती की प्राथमिकता 'तुलनात्मक साहित्य' है। 'ज्ञान' जगत् में सर्वश्रेष्ठ है। अतः ज्ञान प्राप्ति के मूल में कई जिज्ञासाएँ होती हैं जो आदमी को बेचैन करती हैं। व्यक्ति स्वयं के बारे में सोचते-सोचते समाज, राष्ट्र तथा विश्व के प्रति सोचकर गंभीर हो जाता है और उसके दीमाग में संचारित सकारात्मक-नकारात्मक खयालों में ही 'तुलना' जन्म लेती है। यही तुलना एक-दूसरे के विचार; भावना जानने में सहयोग देती है। तुलनात्मक अध्ययन से कई जिज्ञासाओं की पूर्ति होती है, साथ ही साहित्य की सीमाओं का एहसास होता है और मनुष्य अपनी सीमाओं से ऊपर उठने की कोशिश भी करता है। यही इसका नतिजा समझना चाहिए।

• शब्द संकेत (Key Words):-

मराठी तथा हिंदी दो भिन्न भाषाओं की रचनाओं के सौंदर्य को अवगत करने का सुअवसर अर्जित करना।

• प्रस्तावना:-

'सौंदर्य' नयनों को सुख देने वाला प्रतीति रूप है। सौंदर्य वातावरण, परिवेश, प्रभाव एवं जरूरत के मुताबिक घोषित होता है अर्थात् 'सौंदर्य' केवल मानसिक प्रभाव पर निर्भर होता है। इस अर्थ में दलित साहित्य का सौंदर्य स्वातंत्र्य, समता, बंधुता, न्याय, वेदना, विद्रोह, बेचैनी प्रामाणिकता आदि के साथ ही शिल्पगत दृष्टि से अवगत किया जा सकता है। दलित साहित्य जिस भाषा का प्रयोग करता है उसमें नकार, विद्रोह, आक्रोश, तथा विरोध में संगठन शैली की अभिव्यक्ति है। इसमें मिठास नहीं बल्कि खटास (खट्टापन) है। कबीर की भाषा किस तरह सधुक्कडी (मिश्रित) रही है उसी तरह दलितों की भाषा जनवादी है। गालीगलौज, अशिल्लता दलितों का एक अमोघ अस्त्र है। जिसमें पांडित्य, कृत्रिमता, बोझिलता न के बराबर है। यह साहित्य अपनी प्रकृति के अनुरूप सहज, सरल, ग्रामीण बोली के शब्दों में प्रस्तुत है। इसलिए इसकी ओर देश-विदेश के साहित्यकार, आलोचक आकृष्ट हुए हैं।

हिंदी तथा मराठी दलित नाटकों का तुलनात्मक अध्ययन के उपरान्त भाषागत जो तथ्यांश पाए गए, इन तथ्यांश को निम्नलिखित मुद्दों के जरिए प्रस्तुत किया है।

१. घर्माडंबर की सरल तथा सहज भाषा:-

भारत वर्ष के वंचित (दलित) आदिवासी समाज के प्रति मानवतावादी सोच विकसित करने हेतु दलित साहित्य की रचना हुई 'मराठी' दलित साहित्य इतना विकसित है कि इसने कई भारतीय भाषाओं को निर्देशित करके जनमानस को तुलनात्मक अध्ययन करने की प्रेरणा भी दी है। हिंदी दलित नाटककारों ने मराठी दलित साहित्य के प्रभाव को महें नजर रखकर कुछ नाटक लिखे हैं जिनमें माताप्रसाद, रत्नकुमार सांभरिया, रूप

२५. भारतरत्न डॉ. बाबासाहेब आंबेडकर यांचे स्त्री मुक्तीविषयक कार्य

प्रा. झरेकर रमेश सोनु

उपप्राचार्य व इतिहास विभाग प्रमुख एस. एस. जी. एम. कॉलेज, कोपरगांव, जि. अहमदनगर.

प्रस्तावना

२० व्या शतकात महाराष्ट्रातील स्त्रीमुक्तीचा विचार प्रवाह व चळवळ प्रगल्भ होत चालली आहे. महाराष्ट्रात ब्राह्मणी पार्श्वभूमीवर, हिंदुत्वाच्या चौकटीत स्त्री प्रश्नाचा विचार केला तर काही विचारवंतांनी 'अब्राह्मणी' छावणीशी नाते जोडत स्त्रीदास्यत्वांचा विचार मांडला. वर्गवादी स्त्रीमुक्ती प्रवाहाने कष्टकरी स्त्रियांच्या प्रश्नांना वाचा फोडली. 'या सर्व पार्श्वभूमीवर डॉ.बाबासाहेब आंबेडकरांनी स्त्रीमुक्तीबाबत विचार मांडले. अब्राहमणी क्रांतीकारी संप्रदायाने स्त्री शोषणाच्या तीन संस्थांवर प्रहार केला आहे. एक जातिव्यवस्था, दोन वर्ग व्यवस्था आणि तीन पुरुषसत्ता डॉ.बाबासाहेब आंबेडकरांनी स्त्रीमुक्ती विषयक चिंतनात हेच सूत्र वापरले. डॉ.आंबेडकरांनी जातिव्यवस्थेत स्त्रियांचे शोषण कशा प्रकारे होते याचे विस्ताराने विचार व मांडणी केल्याचे दिसते. त्यातील महत्वाचे ठळक मुद्दे खालीलप्रमाणे आहेत.

१) स्त्रिया जातिव्यवस्थेचे प्रवेशद्वार आहेत. २) स्त्री दास्य वट्ट करण्याचे काम जातिव्यवस्था करते. ३) ब्राह्मणी संस्कृती स्त्रीदास्यास जबाबदार आहे. ४) पुरुषसत्ताक, जातिव्यवस्था कायद्यांना नकार म्हणून हिंदू कोड बिलाची मांडणी. ५) दलित स्त्रियांच्या अस्मिता उभारणीचा प्रयत्न. ६) दलित स्त्रियांमध्ये राजकीय जाणीव जागृती. ७) स्त्री अत्याचाराच्या विरोधात डॉ.आंबेडकर.

१) स्त्रिया जातिव्यवस्थेच्या प्रवेशद्वार आहेत

जात म्हणजे बंदिस्त वर्ग आहे. 'मांसभक्षणातून अस्पृश्यतेची निर्मिती झाली', 'जातींतर्गत विवाह हेच जातीचे व्यवच्छेदक लक्षण आहे.' अशा विविध संदर्भात जातिव्यवस्थेचे विश्लेषण डॉ.आंबेडकर करतात. परंतु त्यांच्या जाति व्यवस्थाविषयक चर्चा विश्वाचे महत्त्व असे की, जातिव्यवस्था आणि स्त्रीशोषणाचा जवळचा संबंध त्यांनी स्पष्ट करून दाखविला आहे. म्हणजेच जातिव्यवस्था विश्लेषणात स्त्री शोषणाचा विचार डॉ. आंबेडकरांनी मांडल्याचे दिसून येते.

डॉ.आंबेडकरांच्या मते जातिव्यवस्थेचे प्रमुख लक्षण, 'विटाळ', किंवा 'अस्पृश्यता' नसून जातींतर्गत विवाह हेच जातीचे प्रमुख लक्षण आहे. जातींच्या अंतर्गतच विवाहाची रूढी कशी टिकवून ठेवली आहे याचा विचार केल्यास जातीचा उगम सापडतो. सगोत्र विवाहाची पध्दत जिथे अस्तित्वात असते तेथे जाती अस्तित्वात नसतात. परंतु भारतात जाती आहेत आणि 'स्वगटांतर्गत वरचष्मा झाल्यामुळेच निदान भारतात तरी जातीची निर्मिती झाली' असे बाबासाहेबांचे प्रतिपादन आहे.

डॉ.आंबेडकर असा प्रश्न उपस्थित करतात, की जातीतच लग्न झाली पाहिजेत असे केवळ फर्मान काढून हे कार्य शक्य झाले नसते. कारण परस्पर सान्निध्यात जे लोक राहतात; त्यांच्यात परस्परात मिसळून

२७. डॉ. बाबासाहेब आंबेडकर यांच्या विचारांची प्रासंगिकता

प्र. सी. सुयेकर वैशाली प्रशांत

सहायक प्राध्यापक, राज्यशास्त्र विभाग, अण्णासाहेब आवटे कॉलेज, मंचर.

डॉ. बाबासाहेब आंबेडकर हे केवळ एक नाव नमून तो एक विचार झालेला आहे. इतकेच नाही तर आज ती एक सराफ अशी चळवळ बनली आहे. समाजकारण, राजकारण अशा क्षेत्रांमध्ये परिवर्तन करण्याची ताकद त्यांच्या विचारांमध्ये आहे. भारतीय समाज हा वर्णव्यवस्थेवर आधारित होता. व्यक्तीला वर्णव्यवस्थेच्या चौकटीमध्येच जीवन जगावे लागत होते. ब्राह्मण, क्षत्रीय, वैश्य आणि क्षुद्र या वर्णांची सामाजिक बांधणी करण्यात आलेली होती. यानूनच जातीव्यवस्था आस्तित्वात आली. सवर्ण आणि अस्पृश्य अशी विभागणी करण्यात आली. आणि अस्पृश्य समाजावर वर्षानुवर्षे अन्याय-अत्याचार झाला. त्यांच्यावर होणाऱ्या अत्याचाराला दाद मागण्यासाठी कोणतीही अधिकृत अशी समाजमान्य व्यवस्था नव्हती. डॉ. बाबासाहेब आंबेडकर यांनी मात्र अस्पृश्यता ही सामाजिक समस्या आहे असे मत प्रथम मांडले. हिंदू धर्म आणि त्याची शिकवण हीच अस्पृश्यांच्या अधोगतीस जबाबदार असल्याचा निष्कर्ष त्यांनी काढला. त्यांनी संबंध ह्यातभर मानवमुक्तीसाठी लढा दिला. त्यांनी सामाजिक, शैक्षणिक, राजकीय, आर्थिक, कायदा, इतिहास इ. विविध विषयांचा अभ्यास मानवाला केंद्रस्थानी ठेवून त्यांनी केला. भारतात सामाजिक न्यायाची सुरुवात करणे, ही त्यांची अनुलनीय कामगिरी आहे. इतकेच नाही तर ते आर्थिक विषयाचे मुद्दा तज्ञ होते. राज्य समाजवादाची पुनर्रचना, शेतमजुरांना मिळणाऱ्या विविध सोई, चलनपुरवठा, दारिद्र्य आर्थिक पिढ्यवृत्त अशा अनेक विषयांचा त्यांनी अभ्यास केला.

या शोध निबंधात त्यांच्या राजकीय विचारांची प्रासंगिकता स्पष्ट करण्याचा प्रयत्न केला आहे. कारण त्यांनी जे प्रिय तत्त्वज्ञान मांडले आहे, त्यामध्ये सर्वसामान्य लोकांच्या विकासाचा विचार त्यांनी केलेला आहे. मानवी हक्क, स्त्री-पुरुष समता, नैतिक मानवी मूल्ये यांच्या निर्मितीवर भर देणारे त्यांचे विचार आहेत. रानडे, गांधी आणि जीना, थोड्स ऑन पकिस्तान, स्टेट्स अँड मायनोरीटीस, भारतीय संसद सभा आणि त्यांची भाषणे सर्वांमधून त्यांचे राजकीय विचार स्पष्ट होतात. व्यक्ती आणि समाज यांच्यातील परस्परसंबंध त्यांनी त्यांच्या विचारमधून सांगण्याचा प्रयत्न केला आहे.

१. लोकशाहीबाबतचे विचार

डॉ. बाबासाहेब आंबेडकर लोकशाहीचे कट्टर पुरस्कर्ते होते. लोकशाहीचे तात्विक अधिष्ठान आणि कार्यपद्धती याविषयी त्यांनी पुष्कळ विवेचन केले आहे. सामाजिक आणि राजकीय जीवनात रक्ताचा एकही थेंब न सांडता क्रांतिकारक बदल घडवून आणता येतात ते केवळ लोकशाहीमुळेच. लोकशाहीचा कारभार करण्याचा अधिकार ज्यांना प्राप्त झाला आहे. अशा लोकांनी शांततेचा पुरस्कार करून सामाजिक व आर्थिक समता प्रस्थापित केली तर ते लोकशाहीचे खरेखुरे सेवक आहेत, असे त्यांचे मत होते. राजकीय क्षेत्रात जेवढ्या उत्कटतेने लोकशाहीचा आग्रह धरला जातो, तेवढा तो सामाजिक व आर्थिक क्षेत्रात

६. भारत-चीन संबंध आणि आत्मनिर्भर भारत

प्रा. डॉ. सुपेकर वैशाली प्रशांत

विभागप्रमुख, राज्यशास्त्र विभाग, अण्णासाहेब आवटे कॉलेज, मंचर.

प्रस्तावना

भारताच्या आर्थिक क्षेत्रांमध्ये परिवर्तन करणारी एक मोठी घटना म्हणजे कोरोना महामारीच्या काळात केंद्र सरकारने घोषित केलेली योजना आत्मनिर्भर भारत होय. जागतिक व्यापारावर कोरोनाचा प्रभाव पडल्याने भारतातील ३३ क्षेत्रांवर गंभीर परिणाम झाले, त्यातूनच आत्मनिर्भर भारत या संकल्पनेचा जन्म झाला. या संशोधन पेपरमध्ये भारताने सुरु केलेल्या या मोहिमेचा भारताच्या चीन बरोबरच्या संबंधावर काय परिणाम होण्याची शक्यता आहे, चीन ची आक्रमकवादी भूमिकेवर ही योजना नियंत्रण ठरू शकेल काय? याचा अभ्यास करण्याचा प्रयत्न या संशोधन लेखामध्ये करण्याचा प्रयत्न झाला आहे. भारत व चीन या दोन देशांच्या संबंधाचा विचार करता त्याला अनेक आयाम असलेले दिसून येतात. एकीकडे सीमावाद, पाकिस्तान आणि नेपाळ यांना हाताशी धरून भारताच्या विरोधातील कारवाया, गलवान खोऱ्यातील, पॅंगॉन्गत्सो मधील संघर्ष सुरु असताना दिसतो तर दुसरीकडे चीन बरोबर आपले व्यापारी हितसंबंध देखील असलेले दिसून येतात. त्यामुळे भारतासमोर दोन प्रश्न होते किंवा आहेत ते असे की, लष्करी पातळीवर चीन ला अटकाव करणे आणि दुसरीकडे चीन सोबत असलेले व्यापारी अवलंबीत्व कमी करण्यासाठी ठोस निर्णय घेणे, त्यासाठी देशांतर्गत पातळीवर सूक्ष्म, मध्यम आणि छोट्या प्रकल्पाचा विस्तार होणे गरजेचे होते. यासाठीच आत्मनिर्भर भारत ही संकल्पना समजून घेणे आवश्यक आहे.

उद्देश

1. आत्मनिर्भर भारत ही संकल्पना समजून घेणे.
2. भारत-चीन संबंधाचा (व्यापारी क्षेत्र) विचार करणे.
3. या योजनेचा प्रभाव भारत-चीन परराष्ट्र धोरणावर कसा पडेल याचा विचार करणे.

आत्मनिर्भर भारत -आशय

आत्मनिर्भर भारत याचा अर्थ स्थानिक उद्योगांना प्रोत्साहन देऊन त्यांना जागतिक दर्जा प्राप्त करून देणे आणि आंतरराष्ट्रीय स्तरावर त्यांना स्पर्धाक्षम बनविणे होय. भारताच्या पंतप्रधानांनी १२ मे २०२० रोजी आत्मनिर्भर भारत या योजनेची सुरुवात केली. या योजनेतर्गत अनेक प्रकारच्या कर्ज सुविधा, सबसिडी, २० लाख करोडचे पॅकेज, MSME लोन, किसान क्रेडिट कार्ड, शिशुमुद्रा ऋण, CLSS अशा अनेक प्रकारच्या योजनांचा समावेश आहे.



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कोवीड-१९ : स्थलांतरित मजुरांचे हक्क व न्यायालयीन सक्रीयता

प्रा. वैशाली प्रशांत सुपेकर

राज्यशास्त्र विभाग,

अण्णासाहेब औटे कॉलेज, मंचर, ता. आंबेगाव, जि. पुणे

प्रस्तावना

जगामध्ये चीनमधील वुहान येथे 'कोरोना' या विषाणूजन्य आजाराची सुरुवात झाली आणि हळूहळू सर्वत्र पसरत जाऊन भारतातही सर्वत्र तो पसरू लागला. त्यामुळे २४ मार्च २०२० रोजी संपूर्ण देशभरात लॉकडाऊन जाहीर करण्यात आले. फार वर्षांपूर्वी भारतात प्लेग, मलेरिया, कॉलरा असे संसर्गजन्य आजार कोलकाता, मुंबई, चेन्नई आणि इतर शहरांतही पसरले होते. त्यावेळी भारतात फार मोठ्या प्रमाणात स्थलांतर झालेले दिसून येते. १९४७ मध्ये भारत-पाकिस्तान फाळणी झाली तेव्हा स्थलांतर झाले. त्यानंतर कोवीड-१९ मुळे सर्वात मोठे स्थलांतर झाले. (Davis 1951; Banthia and Dyason, 1999) लॉकडाऊनमुळे अनेक मजूर-कामगार आपापल्या राज्यांत जाण्यासाठी प्रयत्न करू लागले. हे स्थलांतर होत असताना, त्यामुळे उद्योगधंदे, बांधकाम किंवा इतर क्षेत्रावर काय वाईट परिणाम झाले किंवा होतील याविषयी बरेच विचारमंथन झाले; परंतु या शोधनिबंधामध्ये या स्थलांतरितांच्या प्रश्नावर शासनाने घेतलेली भूमिका आणि न्यायालयीन सक्रीयता याविषयी संशोधन करण्याचा प्रयत्न झालेला आहे.

उद्दिष्टे

- १) शासनाच्या स्थलांतरितांविषयीच्या धोरणाचा अभ्यास करणे.
- २) न्यायालयाने या विषयासंबंधी सक्रीयता दाखविलेली आहे की नाही याचा अभ्यास करणे.

भारताच्या अर्थव्यवस्थेत स्थलांतरित मजूर हा मजबूत कणा मानला जातो. २०११ च्या जनगणनेनुसार १९४ दशलक्ष कामगार संघटित व असंघटित क्षेत्रात काम करत होते. आता त्यांची संख्या निश्चितच वाढली आहे, यात शंका नाही. दिल्ली, गोवा, हरियाणा, पंजाब, महाराष्ट्र, गुजरात आणि कर्नाटक या राज्यांमध्ये त्यांचे प्रमाण लक्षणीय आहे. (Policy Brics : The Covid-19, Migration and Livelihood in India : Challenges and

Strategies - आं. जनसंख्या विज्ञान संस्थान देवनार, मुंबई) शहरीकरण वाढत असताना आर्थिक कारणांसाठी होणाऱ्या स्थलांतरांचे प्रमाणही वाढत गेलेले दिसून येते. आपल्या देशात विकास आणि स्थलांतराचे प्रश्न एकमेकांशी थेट संबंधित असल्याचे दिसते. मात्र स्थलांतराचा प्रश्न केवळ आर्थिक नसून सामाजिक व सांस्कृतिक आहे. जनगणना व आणि राष्ट्रीय नमुना पाहणीने स्थलांतराची सात कारणे मांडली आहेत. काम व रोजगारी संबंधित व्यापार, शिक्षण, विवाह, जन्माची वेळ व कुटुंबाबरोबर व इतरांबरोबर स्थलांतरण, दोनही गणना करणाऱ्यांच्या मते फक्त ३ टक्के भारतीयांनीच नोकरीसंबंधित कारणासाठी आपले नेहमीचे राहण्याचे ठिकाण सोडले आहे. पण जनगणना व राष्ट्रीय नमुना पाहणीतील विश्लेषणानुसार असे दिसून आले आहे की, १९९१ ते २००१ या १० वर्षांच्या काळात सर्व आंतरराष्ट्रीय स्थलांतरणापैकी ३२% लोकांनीच काम व नोकरीसाठी स्थलांतरण केले आहे. २००७-०८ च्या राष्ट्रीय नमुना पाहणीच्या अभ्यासानुसार १४.१ कोटी श्रमिक वा ३०.९% भारतातील श्रमिकांनी स्थलांतरण केले आहे. (स्थलांतरित श्रमशक्तीची फरफट शांभेना, प्रतिमा जोशी) इंटरनॅशनल लेबर ऑर्गनायझेशन म्हणजेच खडज च्या अहवालानुसार, भारताच्या एवूण ५० कोटी श्रमशक्तीपैकी ९०% श्रमशक्ती ही असंघटित रोजंदारी रोजगाराशी जोडलेली आहे. म्हणजे ४५ कोटी लोक कोणतीही सामाजिक सुरक्षा नसलेले किंवा अगदी तुटपुंजी सुरक्षा असलेले कष्टकरी आहेत. रोजगार आणि किमान वेतनाची कोणतीही शाश्वती नाही.

आता या कोरोनाच्या पार्श्वभूमीवर जगभरच उद्योग-व्यवसाय आणि रोजगार यांच्यावर संकट ओढवलेले असताना एकट्या भारतात या परिस्थितीमुळे किमान ४०% लोक अधिक गरिबीत ढकलले जातील असे आयएलओ सांगते. कोरोनाच्या वैश्विक संकटामुळे जागतिक अर्थव्यवस्था नाजूक अवस्थेत आहे. विविध देशांनी नाईलाजाने अंमलात आणलेल्या लॉकडाऊनमुळे अर्थव्यवहार ठप्प झालेले आहेत. रोजगार बंद झाल्याने