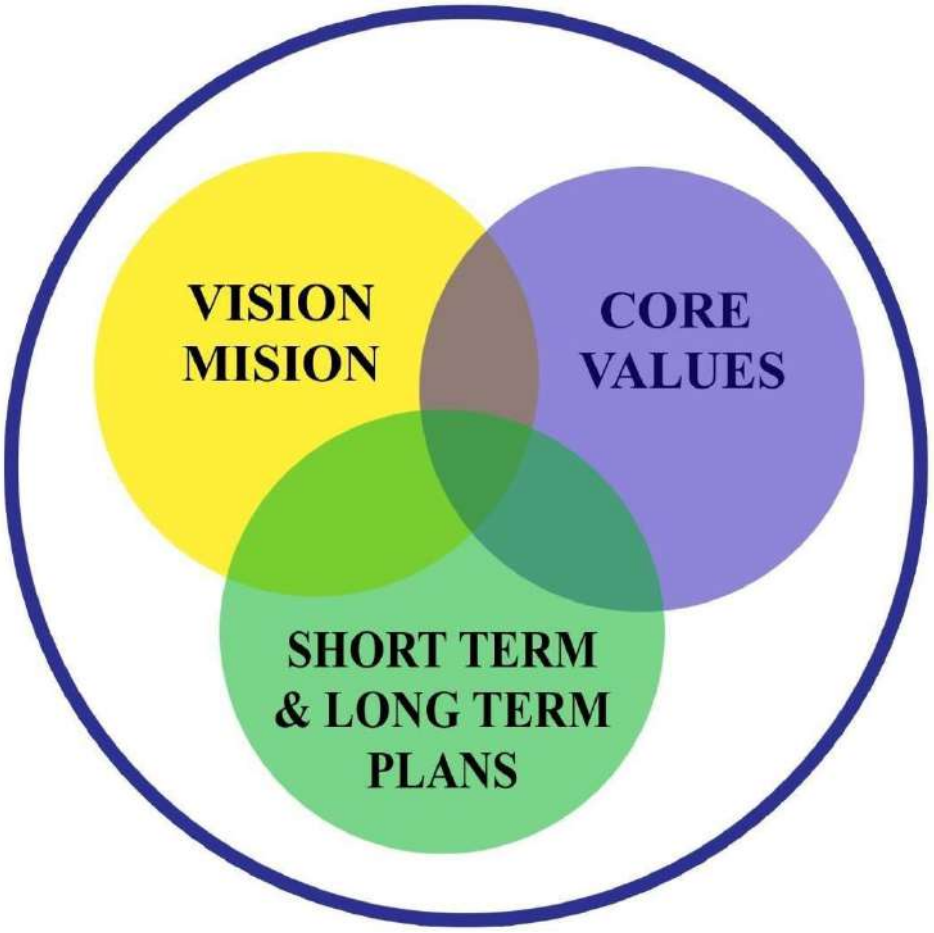
ST.ANN'SCOLLEGEFORWOMEN,
MALKAPURAM, VISAKHAPATNAM-530011

6.2.1 The institutional Strategic Perspective plan is effectively deployed

Document 1: **Strategic Plan**



Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

VISION

We envisage the empowerment of young girls of today through value based holistic education to champion the cause of justice, peace, love, truth, and live in harmony with the nature and are ever open to future growth.

MISSION

St. Ann's College for Women through value based education empower the young girls who are Intellectually competent, spiritually mature, morally upright, psychologically integrated, physically healthy and socially acceptable who live in harmony with nature and God.

CORE VALUES

- **Sensitivity**
- **Alertness**
- **Service**
- **God Consciousness**
- **Altruism / Compassion**
- **Universal brotherhood**
- **Religious Tolerance**
- **Emotional Maturity**
- **Intellectual Excellence**
- **Creative/ Critical Thinking**
- **Moral social responsibility**
- **Eco-friendliness**
- **Dignity of labour**
- **Ethical leadership**

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

Strategic Plan for Administration

Long term goals

1. Construction of Examination Block

2. Provide separate staffrooms for each department

3. Increase the number of classrooms

4. Introduce Postgraduate Programme.

5. Expand the available Bachelor Programmes

6. Improve the admission rate

Short term goals

1. Gain an autonomous status for the institution.

2. Provide a facelift to the parking lot.

3. Develop the ambiance of the institution by plantation of trees

4. Implement ERP

5. Volunteer Educational assistance to one of the poorest slum areas.

6. Get a good NIRF ranking

7. Getting an ISSN number for the institution.

8. Conduct international and national seminars/workshops.

9. Establish more MoUs

10. Enhance overall educational facilities

ST. ANN'S COLLEGE FOR WOMEN

MALKAPURAM, VISAKHAPATNAM-53001

Document 2: **Institute Level Objectives**

- **Holistic Education**: Our educational program aims at the integrated development of the human person. As a catholic institution, we attempt to lead our students to various avenues of knowledge and help them to think creatively. We focus our attention on providing a sound, intellectual, spiritual, psychological, physical, moral, social, and cultural formation.

- **Academic Excellence**: In addition to textual knowledge, our educational institutions inculcate in the student's intellectual curiosity, habits of systematic work, personal quest for knowledge, critical and creative thinking, and an aptitude for research.

- **Spiritual Education:** The Spiritual Education programs are geared towards fostering in our students a high degree of awareness of God, self, others, and the universe, religious tolerance, the capacity to face challenges and transcend suffering, the quality of being inspired by vision and values, and a sense of communion with all living beings.

- **Physical development:** Our curriculum includes a well-developed program of physical development, sports and games, yoga, and other outdoor exercises which help to develop a healthy body, self-discipline, and an attitude of grateful acceptance of one's life as a gift of God. It also promotes the spirit of teamwork.

- **Creative leadership:** Students are trained in leadership qualities to be inspiring persons with courage and inner strength and to take up responsibilities for the welfare of all.

- **Faith formation:** As directed by the founder, our institution has the responsibility to make the values of Jesus come alive in the lives of Christian/ Catholic students. With this in mind, we facilitate Bible study and Catechism classes for Catholic students.

- **Value Education:** We prepare future citizens who would think and work for the motherland with the spirit of dedication, irrespective of their differences in caste, creed, or religion. A balanced sense of values is fostered to prepare the students for different professions and a meaningful life.

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

- **Universal Brotherhood:** The students are helped to be aware and accept that all are children of the same God, the Father who is the author and source of life and creation. Our educational program enables the students to respect all religions. It creates awareness that the people of different religions are co-pilgrims guiding one another towards the one immanent and transcendent God.

- **Dignity of Labour**: Our educational program fosters a healthy attitude towards manual labor and hard work. The staff and students take responsibility for keeping the school and surroundings clean. Every employee is treated with dignity and love.

- **Social Awareness**: The students are trained to have respect for basic human dignity and human rights as well as deep compassion for the poor and downtrodden. We make them aware of the evils existing in society and instill in them a sense of justice to establish a just society.

- **Eco-Friendliness**: Love and respect for Mother Earth is an important aspect of our educational endeavor. We help the children grow in harmony with nature. We encourage them to participate in beautifying the environment and preserving the richness of Mother Earth.

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

Document 3:

Department Level Objectives

LEARNING OBJECTIVES OF CHEMISTRY

The Chemistry Curriculum is a program of study consisting of classroom instruction& Laboratory activities that are designed to give students both Theoretical and hands-on knowledge of Chemistry, self-confidence& competence to thrive in a competitive world.

- Understand the relevance of fundamental principles and theories of chemistry to life, nature, and society
- Apply principles of chemical safety both in laboratory settings & other environments
- Keep legible & complete experimental record
- Synthesize & characterize organic & inorganic compounds
- Use the computer as a tool for learning & applying its principles
- Apply the principles of the four sub-fields of chemistry, namely: chemical analysis &instrumental methods of analysis, inorganic chemistry, organic chemistry, and physical chemistry

LEARNING OBJECTIVES OF COMMERCE

1) The main objective of commerce is to provide knowledge about commerce and to prepare the student for vocational competency, including training and skill development.
2) Commerce education helps the students conclude the organization's financial position.
3) It helps to impart the experience of the business world in all its manifestations
4) It equips students with several specialized skills that help them excel in different functional areas of trade, industry, and commerce.
5) Fighting challenges in commerce education by promoting its importance in business and finance
6) To identify future trends in commerce education

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

LEARNING OBJECTIVES OF HISTORY

The teaching of history enables the pupils to achieve various instructional objectives hierarchically. These objectives are

1) Facts Identification
2) Logical and Critical thinking
3) Global Thinking
4) Objective Attitude
5) Interest in Archives
6) Practical Skills

LEARNINGOBJECTIVESOFCOMPUTERSCIENCE

In general, Computer Science has 7 objectives. These are known as 4 pillars of computer science are:

1. Software Engineering
2. Data Structure and Algorithms.
3. Operating System(OS).
4. DataBase Management System(DBMS).
5. Web Interface Technology
6. Object Oriented Programming System(OOPs).
7. System Design.

Computer Science has the following learning objectives at the undergraduate level.

1. Demonstrate breadth and depth of knowledge in the discipline of Computer Science.

2. Analyse a complex computing problem to apply principles of computing.

3. Design, implement, and evaluate a computing based solution to meet a given set of computing requirements in the context of programs discipline.

4. Demonstrate comprehension of modern software engineering principles.

5. Demonstrate proficiency in the analysis of complex problems and the synthesis of solutions to those problems.

6. Demonstrate proficiency in problem-solving techniques using the computer.

7. Demonstrate proficiency in at least two high-level programming languages and two operating systems.

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

LEARNING OBJECTIVES OF DEGREE ZOOLOGY

The Learning Objectives of Zoology could align with the Bloom's Taxonomy, which includes–

1. Remember (Lower Order)

2. Understand (Lower Order)

3. Apply (Lower Order)

4. Analyze (Higher Order)

5. Evaluate & Problem Solving (Higher Order)

6. Create (Higher Order)

The subject, Zoology has the following learning objectives at the undergraduate level.

1. Critical Thinking: The student should be able to understand and utilize the principles of scientific enquiry, think analytically, clearly, and evaluate critically while solving problems and making decisions during biological study.

2. Effective Communication: Able to formally communicate Scientific ideas and investigations of the biology discipline to others using both oral and written communication skills.

3. Social Interaction: Able to develop individual behavior and influence society and social structure.

4. Effective Citizenship: Able to work with a sense of responsibility towards social awareness and follow the ethical standards in society.

5. Ethics: Ability to demonstrate and discuss ethical conduct in scientific activities.

6. Environment and Sustainability: Able to understand the impact of biological science in societal and environmental contexts and demonstrate the knowledge of sustainable development.

7. Self-directed and life-long learning: Able to recognize the need for life-long learning and engage in research and self-education.

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

LEARNING OBJECTIVES OF HINDI

OBJECTIVES

1) The main objective of incorporating Hindi as a subject is to create interest in the language and literature
2) To master the art of communication
3) Hindi is the national language of India, so students should be motivated to study this language
4) Hindi establishes ethical values in students, it leads them in the right direction
5) Literature is the mirror of own society
6) It will reflect the rich diverse culture of our nation
7) The Inclusion of grammar will enable students to perfect their writing skills, it helps them in their career

LEARNING OBJECTIVES OF MICROBIOLOGY

Microbiology gives the knowledge and understanding of the core concepts in the discipline of Microbiology.

Core Objectives:

i. Students will learn how microorganisms are used to study basic biology, genetics, and metabolism.
ii. Students are capable to identify the microorganisms that cause the disease, and methodologies are used in disease treatment and prevention.
iii. Students will learn about the vital role of microorganisms in biotechnology, fermentation, medicine, and other industries.
iv. Students can know about the microbial interaction with the environment including elemental cycles-carbon, nitrogen, and biodegradation, etc.
v. Students will learn how immune cells and immune organs will fight against the infection.
vi. There are some fundamental skills, which would be useful to function effectively within the field of Microbiology.

Scientific Inquiry: Discuss science and scientific methodology as a way of observing, developing new hypotheses, and designing and executing experiments.
Laboratory: Aseptic and pure culture techniques, preparation of samples for microscopy, appropriate methods to identify microorganisms, estimate the number of microorganisms in a sample, and use common lab equipment.
Data analysis*:* Able to collect, record, and analyze the data. Formatting the data into tables, graphs, and charts.

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

LEARNING OBJECTIVES OF PUBLIC ADMINISTRATION

In general, Public Administration has 4 objectives. These are known as the 4 pillars of public administration. They are

1] Economy

2] Efficiency

3] Effectiveness

4] Social Equity

But, as a subject, Public Administration has the following learning objectives at the undergraduate level.

1] The students should be able to lead & manage public governance.

2] The students should participate in & contribute to the policy process.

3] The students should be able to analyze & synthesize different Administrative theories.

4]The critical &creative thinking should be inculcated among students.

5] The life skills like problem-solving, decision making & communication should be promoted.

6] The students' understanding of different administrative systems should be increased.

7] To make the students understand recent trends in Administration like e-governance, new public management & public-private partnership etc…

8] To make the students utilize the knowledge of public Administration as a tool of development.

9] To promote the student's abilities regarding the proper use of

resources

10] To promote Democratic values & lifestyle among youth.

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

LEARNING OBJECTIVES OF MATHEMATICS

The mission of the mathematics department is to provide an environment where students can become mathematical thinkers, competent users, and problem solvers of mathematics and mathematical applications and enable them to become lifelong learners and function as productive citizens.

OBJECTIVES OF OUR DEPARTMENT

1. To offer a set of core courses in mathematics aimed at developing the student's intellectual curiosity, creative ability, and habit of independent study.
2. To provide the opportunity for the student to participate in research projects, summer training, seminars, work experiences, participation in congresses, exchange of students and creative projects.
3. To promote ethics in the profession in courses or other academic activities, such as conferences, orientations, and seminars.
4. To train professionals in the education of mathematics at all levels.
5. To provide opportunities for the student to participate in collaborative work and develop their leadership and group work skills.
6. To facilitate and promote a second concentration in mathematics for students of other disciplines.
7. To provide mentoring through postgraduate students and teachers to individualize and enrich the student's mathematical experience.
8. To provide courses, mentoring, participation in research projects, and other activities for students interested in pursuing graduate studies in mathematics.
9. To provide the opportunity for students to concentrate in mathematics to study related fields.

6.2.1

Long term goals

1. Construction of Examination Block

2. Provide separate staffrooms for each department

3. Increase the number of classrooms

4. Introduce Postgraduate Programme.

5. Expand the available Bachelor Programmes

6. Improve the admission rate

Short term goals

1. Gain an autonomous status for the institution.

2. Provide a facelift to the parking lot.

3. Develop the ambiance of the institution by plantation of trees

4. Implement ERP

5. Volunteer Educational assistance to one of the poorest slum areas.

6. Get a good NIRF ranking

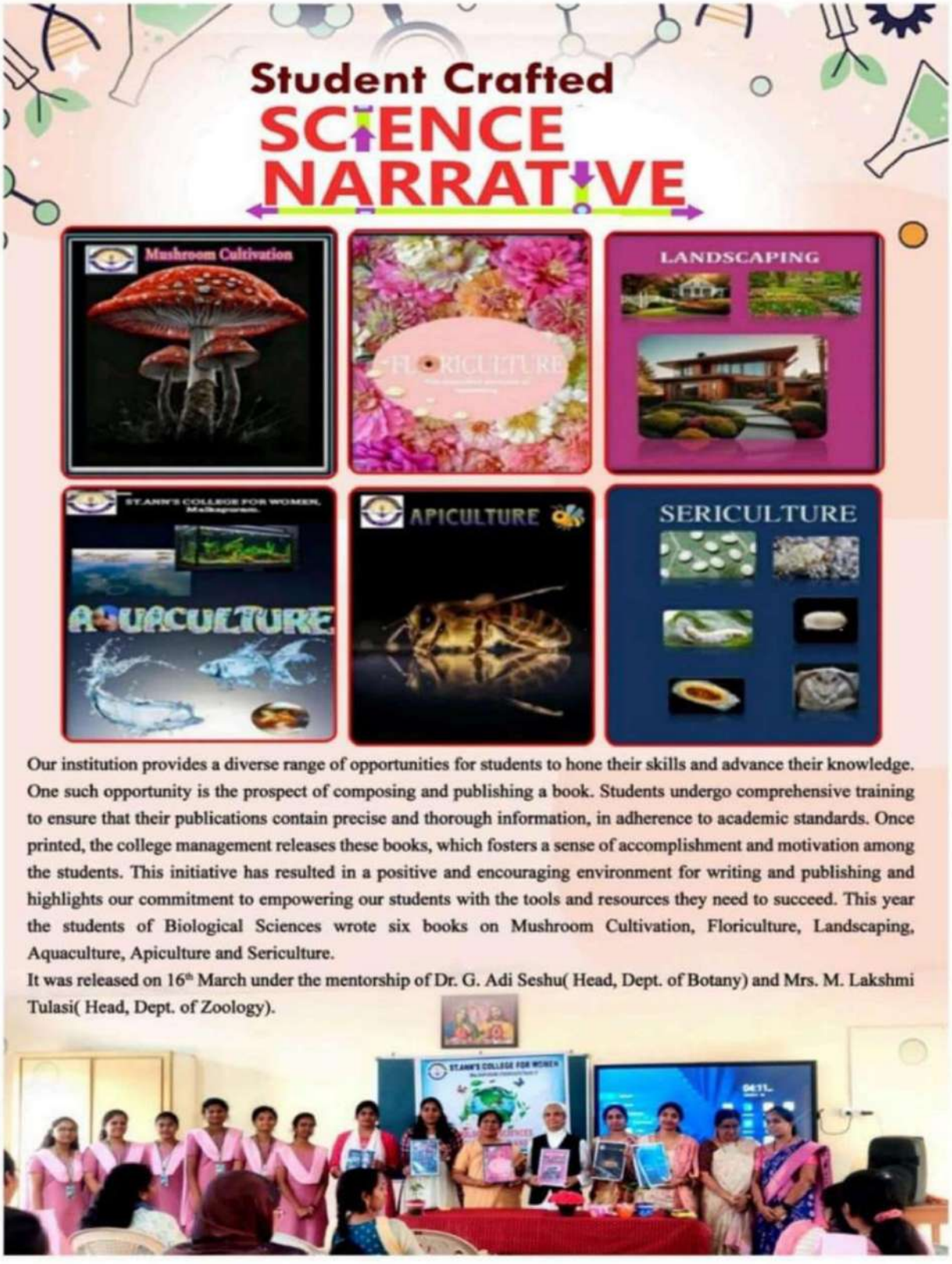
7. Getting an ISSN number for the institution.

8. Conduct international and national seminars/workshops.

9. Establish more MoUs

10. Enhance overall educational facilities

6.2.1 Strategic plan is effectively Deployed



Our institution provides a diverse range of opportunities for students to hone their skills and advance their knowledge. One such opportunity is the prospect of composing and publishing a book. Students undergo comprehensive training to ensure that their publications contain precise and thorough information, in adherence to academic standards. Once printed, the college management releases these books, which fosters a sense of accomplishment and motivation among the students. This initiative has resulted in a positive and encouraging environment for writing and publishing and highlights our commitment to empowering our students with the tools and resources they need to succeed. This year the students of Biological Sciences wrote six books on Mushroom Cultivation, Floriculture, Landscaping, Aquaculture, Apiculture and Sericulture.

It was released on 16th March under the mentorship of Dr. G. Adi Seshu(Head, Dept. of Botany) and Mrs. M. Lakshmi Tulasi(Head, Dept. of Zoology).

6.2.1 Stategic Plan is effectively deployed:Research in Academic Learning.

Number of research papers or journals notified on UGC website during the year:

S.No	Title of paper	Name of the author/s	Department of the teacher	Name of journal	Year of publication
2023-2024(10)					
1	Internal Migration and socio - economic conditions of Construction Women - a study in Visakhapatnam City Andhra Pradesh	Dr. Sivasankar Mandal Baidya, P. Jhansi Lakshmi, P. Reddy Sambram, B.P. Raju, P. Jayalakshmi	Economics	IOSR Journal of Business and Management	2023
2	Sustainability education through School - Community patnerships for the overall wellness of students : A study in Visakhapatnam city Andhra Pradesh	Dr. Sivasankar Mandal Baidya, G. Hymavathi, A. Maruthi, Y. Jaya Krishna, B.P. Raju, P. Jayalakshmi	Economics	International journal of Advances and Applied Research	2023
3	Historical Perspective of Tourism in India	Mrs. G. Lalitha	History	International journal of Academic Research	2023
4	Gandhian approach to rural Development	Mrs. G. Lalitha	History	International journal of Academic Research	2023

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-15

5	A search for identity in Margaret Laurence's A jest of God	Mrs. Abida Begum	English	Journal of Emerging Technologies and Innovative Research	2023
6	Physicochemical Characteristics, Chemical composition and in vitro antioxidant activities of essential oil from ocimum basilicum L. leaves	Asegele Desta, Krishna Chaitanya K, Naveen Kumar A.D, Ch. Prasanthi, P. John Dogulas, Sudish Rai	Medicine, Microbiology & pharmacology	Research Journal pf Pharmacy and Technology	2024
7	Studies on Ulva fasciata and Chaetomorpha antennina from Tenneti park, Visakhapatnam Coastal Area, India	Ch. Prasanthi, Dr. Sr. Prema Kumari	Microbiology & Botany	Uttar Pradesh Journal of Zoology	2024
8	Natural Herbal Sanitizer: A Chemical Free Solution for Hygiene	Shaik Valisha, V. Anjali Devi, Maria Sundari, Dr.Sr. Prema Kumari	Chemistry & Botany	Intellectual property of India	2024
9	Wealthy wheat Drop: A System for Sustainable wheat Harvesting and organisation	Ch. Prasanthi, Dr. Sr. Prema Kumari	Microbiology & Botany	Intellectual property of India	2024
10	Method and System for Micro-Scale Dehydration of vegetables	Ch. Prasanthi, Dr. Sr. Prema Kumari, A. Roja	Microbiology, English & Botany	Intellectual property of India	2024

Principal
St.Ann's College for Women
Mallapuram, Visakhapatnam

1. Cover Page of IOSR

Principal
St.Ann's College for Women
Mallapuram, Visakhapatnam-13

Front Page of Paper:

IOSR Journal of Business and Management (IOSR-JBM)
e-ISSN:2278-487X, p-ISSN: 2319-7668. Volume 25, Issue 8. Ser. 4 (August. 2023), PP 50-55
www.iosrjournals.org

Internal Migration and socio-economic conditions of Construction Women- a study in Visakhapatnam City Andhra Pradesh

1.Dr. Sivasankar Mandal Baidya, *HOD, Assistant Professor, Value Education cell, KL deemed to be University, Vaddeswaram, Guntur.*
2.PUJARI JHANSI LAKSHMI, *MATERS IN EARLY INTERVENTION(NIEPD), LECTURER AT SIRDS, SANGAREDDY*
3. Pratima Reddy Sambram, *Batchlor's in Physiotheraphy (BPT) and Masters in Development Studies, (MADVS)*
4. B.P.Raju, Assisstant *Professor in Economics, St. Ann's College for Women, Malka Puram, Visakhapatnam*
5. Prof. Peri. JAYALAKSHMI, *Former HOD, Dept. of Economics, St. Joseph's College for Women, Visakhapatnam*

ABSTRACT
Introduction: *Patterns of Migration have always fascinated demographers. Elaborate theories have been formulated on the subject and policy interventions designed to reduce or take care of the effects of migration. Migration is the barometer of changing socio-economic and political conditions at the national and international levels. It is also a sign of wide disparities in economic and social conditions between the origin and destination. The results of Census 2011 will reveal the contours of migration in the last decade. In India, migration has been considered as way of life where the people migrate from place to place due to political Socio-economic and demographic reasons. Rural-Urban migration has been historically connected with industrialization, urbanization and economic growth. Rural-Urban migration eases inter-sectoral factor mobility and plays a vital role for structural changes. Moreover, migration has also been a key livelihood and survival strategy for many below poverty groups across the developing world, particularly in India. In many development research studies, it is proved that rural-urban migration leads to industrialization and economic growth taking to account the experiences of the developed world in early 20th century. Rural-urban migration reduces the pressure of population in the rural areas and thereby should improve economic conditions and reduce rural poverty. . The main* ***objectives*** *of the study is 1.to describe lives and livelihoods conditions of female migrants 2. to study the impact of migration on the income earned by the migrants. 3. It also devises how supportive information and its strategic sharing contribute for safe migration. 4. To analyze the changes of the per capita expenditure of the migrant households.* ***Methodology:*** *The study depends on primary and secondary data. The primary data collected through interview and questionnaire (both qualitative and quantitative).* ***Materials and Methods:*** *This paper was attempted to study the migrated women workers in construction industry in the city. The total sample for the study was 100 from four zones (East, West, North and South) of the city. Pretested multiple choice questionnaire applied. The migrants should have been in the place of city at least for a period of two years.* ***Hypothesis:*** *The hypothesis tested in the study was migration transform lives and livelihoods through enhance the income of the migrants and leads to a decline in the poverty level and debt burden among sampled group. Not only improve their living standards but savings also possible.* ***Conclusion:*** *The major findings of the study are migration has been a long livelihood strategy in India, has considerable impact on individual households. Research survey in the city findings show that migration has significantly raised the income, savings and decline the debt burden. In brief, migration has transferred the lives in terms of improving their income and standard of living and facilitated a significant decline in poverty of respondents in the study. Rural urban migration reduces the pressure of population in the rural areas and thereby should improve economic conditions and reduce rural poverty. This might be occurred due to the accelerated pace of rural urban migration.*

Key words: Migration, Livelihoods, transforming, Strategy, Poverty,

Date of Submission: 02-08-2023 Date of Acceptance: 12-08-2023

DOI: 10.9790/487X-2508045055 www.iosrjournals.org 50 | Page

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-53

2. Cover Page of International journal of Advances and Applied Research:

International Journal of Advance And Applied Research (IJAAR)
Peer Reviewed Bi-Monthly

ISSN – 2347-7075
Impact Factor –7.328
Vol.4Issue-38 Sept-Oct- 2023

International journal of advance and applied research (IJAAR)

A Multidisciplinary International Level Referred and Peer Reviewed Journal

Volume-4 *Issue-38*

Published by: Young Researcher Association, Kolhapur, Maharashtra, India

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-53

INDEX

IJAAR **Vol.4 Issue-38** **ISSN – 2347-7075**

Certificate:

Young Researcher Association

INTERNATIONAL JOURNAL OF ADVANCE AND APPLIED RESEARCH

CERTIFICATE

Is hereby awarding this certificate to

NAME- B.P. Raju, Lecturer in Economics, St Ann's College for Women Visakhapatnam.

In recognition of the publication of the paper entitled

PAPER TITLE: Sustainability education through School-Community partnerships for the overall wellness of students: A study in Visakhapatnam City, Andhra Pradesh.

Published after Double blind peer reviewed, and editorial process in Referred INTERNATIONAL JOURNAL OF ADVANCE & APPLIED RESEARCH (IJAAR). ISSN 2347-7075. IMPACT FACTOR 7.328

VOLUME - 4 ISSUE-38 DATE- SEPT - OCT 2022

Dr. Pravin Talekar
Executive Editor

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-53

Front Page of Paper:

International Journal of Advance and Applied Research
www.ijaar.co.in
ISSN – 2347-7075 Impact Factor – 7.328
Peer Reviewed Bi-Monthly
Vol.4 No.38 Sept-Oct 2023

Sustainability education through School-Community partnerships for the overall wellness of students: A study in Visakhapatnam City, Andhra Pradesh

Dr. Sivasankar Mandal Baidya[1], Garuda Hymavathi[2], A. Maruthi[3], Yella. JayaKrishna[4], B.P. Raju[5], Dr. Peri.Jayalakshmi[6]
[1]Assisstant Professor, M.Ed. special Education (ID)
Sahara Institute of rehabilitation and Development studies
[2]M.Sc Psychology, Andhra University
[3]Assisstant Professor, M.Ed. special Education (ID),
Sahara Institute of rehabilitation and Development studies
[4]MSc.Psy, Jail department, Director of ICI
Psychologist & Motivational speaker, Impact Certified Trainer
[5]Lecturer in Economics, St Ann's College for Women Visakhapatnam.
[6]Former HOD, Dept. of Economics, St. Joseph's College for Women
Visakhapatnam, AP.
Email-jayavinod9@gmail.com
Corresponding Author- Dr. Sivasankar Mandal Baidya
DOI- 10.5281/zenodo.10361145

Abstract:

Education is a key component and the main tool in achieving Sustainable Development. The relationship between Education and Sustainable Development is not that easy to understand. It is complex in nature. Any nation's capacity to achieve Sustainable Development Goals and targets will depend on the status and level of education. The United Nations'(UN) decade of 'Education for Sustainable Development' (UNDESD) (2005-2014) significantly highlighted the vital role of education that can and must play in the universal journey towards sustainable development across the globe and saving our planet. In September 2015, the UN formally adopted the 17 sustainable development goals (SDGs) as an outcome of a major global consultative process. The purpose of the study was to explore the extent to which schools involve Communities to support schools and how that partnership enhances school Students' academic performance in Visakhapatnam city In the process of students' performance development, a number of stakeholders play a key role. Community partnership and parent support are most important in the overall performance of students in the society and their success. Students must have access to a range of support and opportunities to enhance their learning and progress, offering collaborative services to improve student mental health, physical health and overall wellness. In this area a number of studies have proven this idea. In this study, the main objective of the author is to study the importance of School-Community partnership in Student overall wellness observed in Visakhapatnam city, Andhra Pradesh with 120 student samples (both Male and female) from 20 schools and also observed Teachers interests in Community partnership in their schools to improvement of student performance. Both primary and secondary data were used in the study. Suitable Statistical tools were applied in the study. Major findings of the study are School-Community partnership which effectively worked in the students overall wellness and progress.

Keywords: School-Community partnership, Wellness, performance, Stakeholders, Progress.

Introduction:

Way back in 2001, Sterling defined 'sustainable education' as a "change of educational culture that develops and embodies the theory and practice of sustainability"; thus it is a transformative paradigm which values, sustains and realizes human potentials in order to attain sustainable economic, social and environmental goals. The United Nations'(UN) decade of 'Education for Sustainable Development' (UNDESD) (2005-2014) significantly highlighted the vital role of education that can and must play in the universal journey towards sustainable development across the globe and saving our planet. In September 2015, the UN formally adopted the 17 sustainable development goals (SDGs) as an outcome of a major global

Principal
St.Ann's College for Women
Maisapuram, Visakhapatnam-53

3. Cover Page of International journal of Academic Research:

Likhitha Publications (ISBN Text Books)
International Journal of Academic Research - ISSN: 2348-7666

Universal Journal of Advanced Multidisciplinary Research - ISSN: 2456-415X

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

Front Page of Paper:

International Journal of Academic Research
ISSN: 2348-7666; Vol.10, Issue-2, April-June, 2023
Impact Factor: 6.023; email: drtvramana@yahoo.co.in

HISTORICAL PERSPECTIVE OF TOURISM IN INDIA

Mrs. G. Lalitha, M.A., M.Phil.
Head, Department of History,
Vice-Principal,
St. Ann's College for Women,
Malkapuram, Visakhapatnam

Abstract: *The history of tourism developed primarily through indirect sources in the ancient period. In India, in the ancient days of agricultural abundance, export of agricultural products created an important trade link. Manufacture of steel from iron-ore for weaponry was another important item of trade by the later Vedic people. Tools and clothing were other renowned Indian products. Contemporary Greek and Hebrew writers have made note of wonder of India and its abundant wealth. Owning to the predominance of trade routes overland, crossing over Asia and Europe, lead to the development of trade tours during ancient period.*

Key Words: *Indian products, Buddhist scriptures, trade and commerce.*

Introduction:

The history of tourism developed primarily through indirect sources in the ancient period. In India, in the ancient days of agricultural abundance, export of agricultural products created an important trade link. Manufacture of steel from iron-ore for weaponry was another important item of trade by the later Vedic people. Tools and clothing were other renowned Indian products. Contemporary Greek and Hebrew writers have made note of wonder of India and its abundant wealth. Owning to the predominance of trade routes overland, crossing over Asia and Europe, lead to the development of trade tours during ancient period.

Tourism in the ancient period

In the earlier days, pilgrimage assumed great importance. Ashoka the great, travelled across India to the spread the teachings of Lord Buddha. He covered places from Pataliputra to Lumbini on to Kapilavastu and Sarnath and finally to Gaya. Ashoka the great has set up special memorials at each spot and set up rest houses for travellers to take rest. Trees were planted along the road sides to give shelter to travellers from hot sun. Kanishka the Great, was an emperor of the Kushan dynasty. His conquests and patronage of Buddhism played an important role in the development of the Silk Road. Silk Road played very important role in facilitating economic, cultural, political and religious interactions between the East and West. Harshavardhana was another great emperor who gently influenced by the Buddhist teachings, built institutions and Dharamsalas for the travellers. Rest houses were constructed in towns and countryside. A number of monasteries were built for religious tourists. By doing this travelling was very much improved and it was made convenient. Brahmadeya villages evolved into centres of learnings attracting scholars. At this time the Buddhist Sanga established the tradition of pilgrimage, when monks visited villages and courts preaching the teachings of Lord Buddha. Rest houses were provided for the travellers.

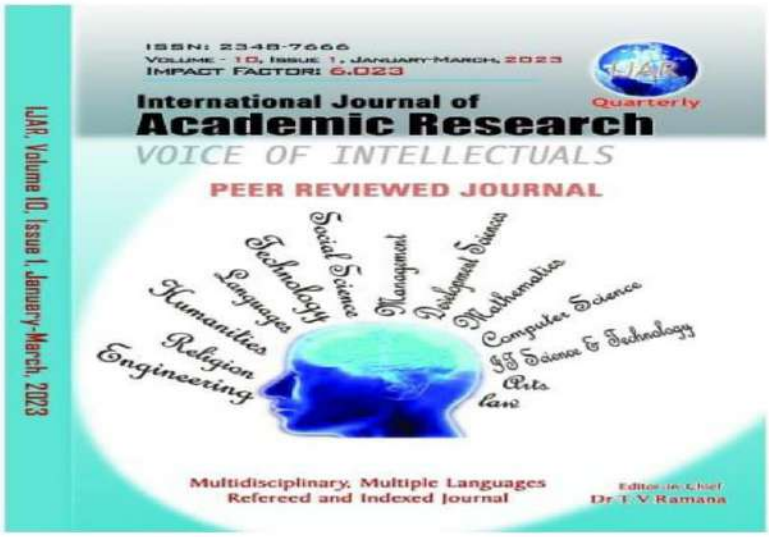
Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

4. Cover Page of International journal of Academic Research:

Likhitha Publications (ISBN Text Books)
International Journal of Academic Research - ISSN: 2348-7666

Universal Journal of Advanced Multidisciplinary Research - ISSN: 2456-415X

MANUSCRIPT SUBMISSION



Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-15

Front Page of Paper:

International Journal of Academic Research
ISSN: 2348-7666; Vol.10, Issue-3, July-September, 2023
Impact Factor: 6.023; email: drtvramana@yahoo.co.in

GANDHIAN APPROACH TO RURAL DEVELOPMENT

Mrs. G. Lalitha M.A., M.Phil.
Head, Department of History.
Vice Principal
St. Ann's College for Women,
Malkapuram,
Visakhapatnam-11

Abstract: *Gandhian approach to rural development may be labelled as idealist . It attaches supreme importance to more values and gives supreme importance to more values and gives primacy to moral values over material conditions.*

The rural development generally refers to the process of improving the quality of life and economic well being of living in a relatively isolated and sparsely populated area. Gandhiji insisted on the self-sufficiency of Indian villages . Self sufficiency was advocated by him as a basic principle of life because dependence brings in exploitation which is the essence of violence . Rural Development in India is one of the most important factors for the growth of the Indian economy. Rural Development successfully tries to increase the productivity of those areas of rural economies that are experiencing severe poverty challenges.

INTRODUCTION:

Mahatma Gandhi had a vision to develop rural India and tried all villages to be self-dependent. One of the most important feature of rural development is the handloom industry. Handloom is unparallel in its flexibility and versatality permitting experimentation and encouraging innovations. The handloom sector of India is known all over the world for its uniqueness and intricate designs. It has established its reputation as a timeless facet of the rich cultural heritage of India.

Handloom sector is a symbol of the country's glorious cultural heritage and an important source of livelihood in the country. The sector is key to women empowerment as over 70%of handloom weavers and allied workers are women.

The first Handloom industry in India was Bhoodan Pochampally and it marked its place in Indian history as a silk mine in the 18th century. Why is it called Handloom?

Weaving a fabrics done on looms. The looms are either hand operated or power operated. Hand operated looms are called hand looms and power operated looms are called power looms.

To go back to history – Indus valley Civilization is said to the birth place of handlooms in India and is backed by strong archeological evidence, wherein excavation in the sub-continent uncovered spindles and whorls used to spin cotton back in the day.

Therefore Handloom plays a crucial role in the Indian Economy. They provide employment to millions, especially women

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-11

5. Cover Page of Journal of Emerging Technologies and Innovative Research:

INTERNATIONAL JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (ISSN: 2349-5162)
International Peer Reviewed & Refereed, Scholarly Open Access Journal, Impact Factor: 7.95
ISSN: 2349-5162 | ESTD Year: 2014 | UGC, ISSN Approved Journal no 63975

Certificate:

Journal of Emerging Technologies and Innovative Research
An International Open Access Journal Peer-reviewed, Refereed Journal
www.jetir.org | editor@jetir.org **An International Scholarly Indexed Journal**

Certificate of Publication

The Board of
Journal of Emerging Technologies and Innovative Research (ISSN : 2349-5162)
Is hereby awarding this certificate to
Abida Begum
In recognition of the publication of the paper entitled
A Search for Identity in Margaret Laurence's A Jest of God
Published In JETIR (www.jetir.org) ISSN UGC Approved (Journal No: 63975) & 7.95 Impact Factor
Published in Volume 10 Issue 8 , August-2023 | Date of Publication: 2023-08-19

EDITOR
EDITOR IN CHIEF

JETIR2308405 Research Paper Weblink http://www.jetir.org/view?paper=JETIR2308405 Registration ID : 523321

An International Scholarly Open Access Journal, Peer-Reviewed, Refereed Journal Impact Factor Calculate by Google Scholar and Semantic Scholar | AI-Powered Research Tool, Multidisciplinary, Monthly, Multilanguage Journal Indexing in All Major Database & Metadata, Citation Generator

Principal
St.Ann's College for Women
Mallapuram, Visakhapatnam-53

Front Page of Paper:

© 2023 JETIR August 2023, Volume 10, Issue 8 www.jetir.org (ISSN-2349-5162)

JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue

JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A Search for Identity in Margaret Laurence's A Jest of God

Abida Begum (Ph.D Research Schoiar)

Lecturer,Department of English

St.Ann's College for Women ,Malakapuram ,Visakhapatnam, Andhra Pradesh

Dr.S.Prasanna Sree,

Professor, Department of English , Andhra University, Visakhapatnam.

ABSTRACT:-

Margaret Laurence is one of the famous and the most outstanding writers of Canadian literature.Margaret Laurence, hailed as the first lady of the Canadian literature, has set mark in the realm of literature through her Manawaka series, which offer a board panorama of twentieth century Canadian life. Her novels become memorable not only with the unique Canadian voice which she provides through her novels but also with the depiction of her female protagonists. A common theme of freedom and survival can be found in all her Canadian fiction which she beautifully explores through her female characters .The central characters in a Jest of God is Rachel,a schizophrenic spinster forever anxiodtrouble and confused, she never can make a decision for herself.Always considering herself to be inferior, she fails to enjoy the pleasures of life. The novel depicts how Rachel comes to terms with herself , her mother and her circumstances.

Key Words:-

Freedom, survival, realization, motherhood, identity.

Introduction:-

Margaret Laurence is one of the Canadian most distinguished novelists. She began writing as a child in her birth place, Neepawa , Manitoba, contributed to school and college magazines. Her mature writing career began in Somalialand and Ghana where stayed from 1950 to 1957. Her popularity rests on a series of five novels ,all set in the prairie town of Manawaka ,A fictional variation of her native place

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-53

6. Cover Page of Research Journal of Pharmacy and Technology:

Principal
St.Ann's College for Women
Mallapuram, Visakhapatnam

Front Page of Paper:

Physicochemical Characteristics, Chemical composition and *In vitro* Antioxidant activities of Essential oil from *Ocimum basilicum* L. Leaves

Asegele Desta[1], Krishna Chaithanya K[1], Naveen Kumar A.D[2], Prasanthi Cheekurumelli[3], John Dogulas Palleti[4], Sudhish Rai[5]. Zenebe Hagos[1]*

[1]Department of Chemistry, College of Natural and Computational Sciences, Aksum University, Axum, Ethiopia.

[2]Department of Medicine, Texila American University, Lilayi, Lusaka, Zambia.

[3]Department of Microbiology, St. Ann's College for Women, Malkapuram, Visakhapatnam, A.P. India.

[4]Research and Development, Centre for Computational and Biological Sciences (CCBS), 48-12-17, Srinagar, Near RTC Complex, Visakhapatnam - 530016, Andhra Pradesh, India.

[5]Department of Pharmacognosy, Jagrani Devi Pharmacy College, Baradwar, Shakti, Chhattisgarh, India.

*Corresponding Author E-mail: **zenebehagos.2003@gmail.com**

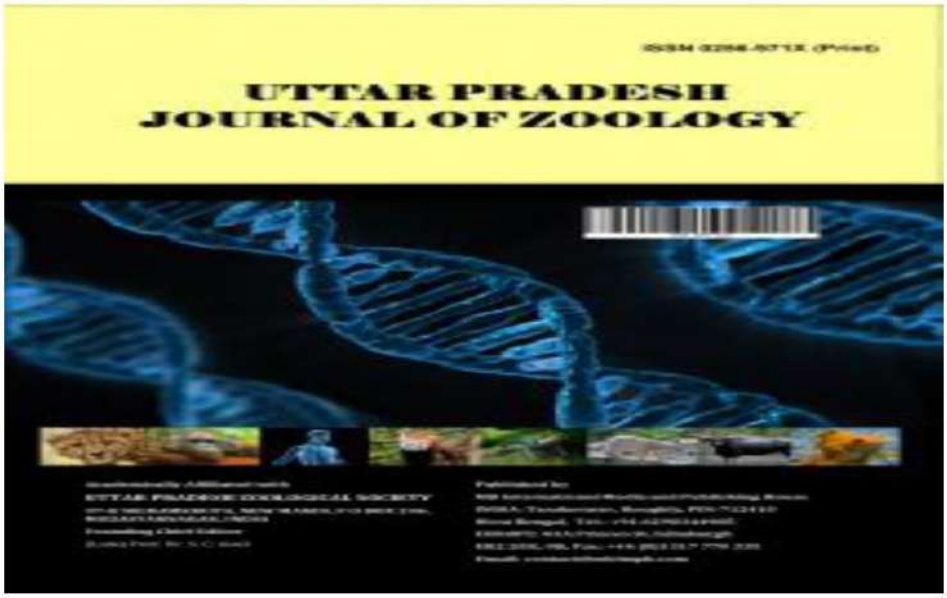
ABSTRACT:

Plant-derived medicines offer a safer alternative to synthetic options, providing significant therapeutic benefits and more economical treatment options. This study aimed to assess the physicochemical characteristics, chemical composition, and antioxidant properties of the essential oil extracted from *Ocimum basilicum* L. leaves harvested in Wukro. The oil was obtained using the hydrodistillation method, and its chemical composition was analyzed using GC-MS. various parameters including density, specific gravity, pH, boiling point, refractive index, acid value, saponification value, and ester value were considered. Antioxidant activities were evaluated using DPPH, ABTS, FRAP, NO inhibition, and OH free radical assays. The yield of oil was determined to be 0.14±0.016%, with GC-MS identifying 30 compounds. Major components included eugenol (32.69%), Octadecatrienoic acid (12.00%), and ethylisoallcholate (9.25%). Antioxidant activity increased with higher concentrations of the essential oil, suggesting synergistic effects among its components. These findings support the potential use of the essential oil as a natural source of antioxidants.

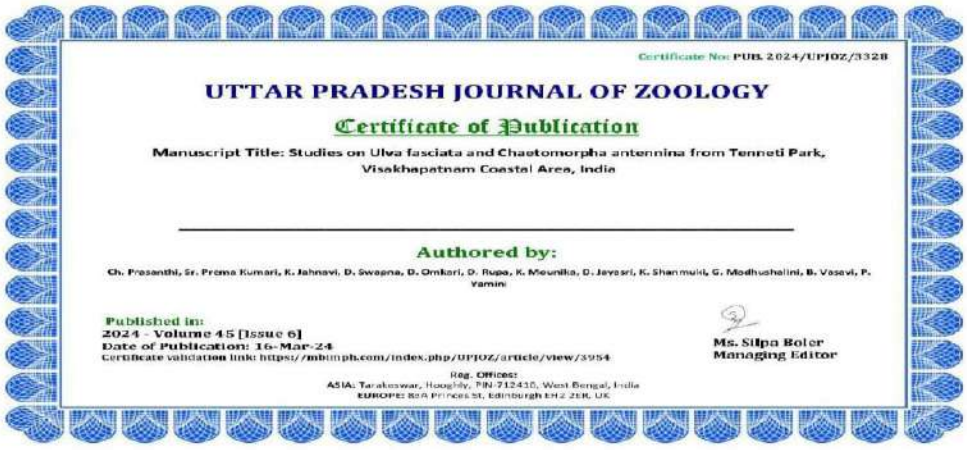
KEYWORDS: Essential oil, *Ocimum basilicum* L., Chemical composition, GC-MS, Antioxidant.

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-13

7. Cover Page of Uttar Pradesh Journal of Zoology:



Certificate:



Certificate No: PUB. 2024/UPJOZ/3328

UTTAR PRADESH JOURNAL OF ZOOLOGY

Certificate of Publication

Manuscript Title: Studies on Ulva fasciata and Chaetomorpha antennina from Tenneti Park, Visakhapatnam Coastal Area, India

Authored by:

Ch. Prasanthi, Sr. Prema Kumari, K. Jahnavi, D. Swapna, D. Omkari, D. Rupa, K. Mounika, D. Jayasri, K. Shanmukh, G. Madhusheilini, B. Vasavi, P. Yamini

Published in:
2024 - Volume 45 [Issue 6]
Date of Publication: 16-Mar-24
Certificate validation link: https://mbimph.com/index.php/UPJOZ/article/view/3954

Ms. Silpa Bolor
Managing Editor

Reg. Offices:
ASIA: Tarakeswar, Hooghly, PIN-712410, West Bengal, India
EUROPE: 80A Princes St, Edinburgh EH2 2ER, UK

Principal
St.Ann's College for Women
Mallapuram, Visakhapatnam-53

Front Page of Paper:

Uttar Pradesh Journal of Zoology

Volume 45, Issue 6, Page 94-101, 2024; Article no.UPJOZ.3328
ISSN: 0256-971X (P)

Studies on *Ulva fasciata* and *Chaetomorpha antennina* from Tenneti Park, Visakhapatnam Coastal Area, India

Ch. Prasanthi [a++*], Sr. Prema Kumari [b#], K. Jahnavi [a†], D. Swapna [a†], D. Omkari [a†], D. Rupa [a†], K. Mounika [a†], D. Jayasri [a†], K. Shanmuki [a†], G. Madhushalini [a†], B. Vasavi [a†] and P. Yamini [a†]

[a] Department of Microbiology, St. Ann's Degree College for Women, Malkapuram, Visakhapatnam, Andhra Pradesh, India.
[b] Department of Botany, St. Ann's Degree College for Women, Malkapuram, Visakhapatnam, Andhra Pradesh, India.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.56557/UPJOZ/2024/v45i63954

Open Peer Review History:
This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: https://prh.mbimph.com/review-history/3328

Original Research Article

Received: 10/01/2024
Accepted: 14/03/2024
Published: 16/03/2024

ABSTRACT

Seaweed is considered as herbal medicine and food source utilized by the coastal community. Seaweed is commonly consumed because it is an important source of iodine. *Ulva fasciata* and *Chaetomorpha antennina* are green seaweed wildly grow in marine environment. Green algae are

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-13

involved in photosynthetic reaction. These are observed worldwide. These algal blooms are a consequence of human activities. Phytochemical compounds are secondary metabolite groups in living organisms that have a certain function for humans. Algae are known to contain a huge variety of bioactive compounds having high potentiality towards medical field. They are seen mainly in shallow waters with high degree of salinity. Now-a-days they have commercially important with their valuable components in the form of as bioactive compounds. The objective of this study was to analyse the potential anti-bacterial activity and antifungal activity, the presence of phytochemical and biomolecules in *U. fasciata* and *C. antennina*. The samples of *U. fasciata* and *C. antennina* was collected aseptically from Tenneti park, Visakhapatnam coastal zone. The research phase includes solvent extraction, phytochemical screening, and antibacterial activity. The zone of inhibition ranges from 0.5nm to 0.7nm by the *U. fasciata* extracts whereas the extracts from *C. antennina* ranges from 0.2nm to 0.3 nm. The presence of phytochemicals was observed in both the green seaweeds. The present study is biofuel extraction from the 2 seaweed extracts. The findings gave a result that *C. antennina* have high potentiality of biofuel production.

Keywords: Sea weeds; Ulva fasciata; Chaetomorpha antennina; anti-bacterial activity; anti-fungal activity; biofuel.

1. INTRODUCTION

"Algae are defined as a group of predominantly aquatic, photosynthetic, and nucleus-bearing organisms that lack the true roots, stems, leaves and specialized multicellular reproductive structures of plants. Algae are an ideal source of nutrients as they are rich in protein, lipids, vitamins, minerals, and essential fatty acids. As a matter of fact, extracts from organisms (plants and animals) and microorganisms (bacteria, algae, fungi) are well known sources of compounds with interesting biological and therapeutic properties" [1,2]. "For example, more than 75% of drugs utilized to treat infectious diseases are derived from natural sources" [3]. "Algae are known to produce secondary metabolites other than those produced by terrestrial organisms" [4]. "Therefore, they have been indicated to be a source of compounds of biomedical interest" [5-7]. "Green algae represent the largest algal group found on earth and inhabit different ecosystems, including fresh and marine habitats" [2]. "They range from unicellular to multi-cellular, microscopic to macroscopic forms. Their thallus varies from free filaments to shaped forms" [2]. "Green algae are characterized by the production of a wide range of metabolites, including polysaccharides, polyphenols, terpenes, and carotenoids which play many different biological activities such as antimicrobial, antioxidant, and antitumor activities" [8]. "Ulva is one of the most widely distributed green algal genera known as sea lettuce" [9]. "Ulva is known to be a good source of food, development of novel drugs and functional foods, and pharmaceutical, in addition to different agricultural applications" [10]. "It has proven to be a rich source of structurally diverse bioactive compounds with valuable biomedical potential" [11]. "The famous ulva product produced exclusively by the *Ulva* genera is a water-soluble polysaccharide with many biological activities, including anticancer and antimicrobial" [12]. "Algae biofuels may provide a viable alternative to fossil fuels; however, this technology must overcome a number of hurdles before it can compete in the fuel market and be broadly deployed. In recent years, biomass has been recognized as a prospective renewable energy source to address these challenges, among which algae is attracting increasing attention due to its fast growth rate, high photosynthetic efficiency and global distribution" [13-15]

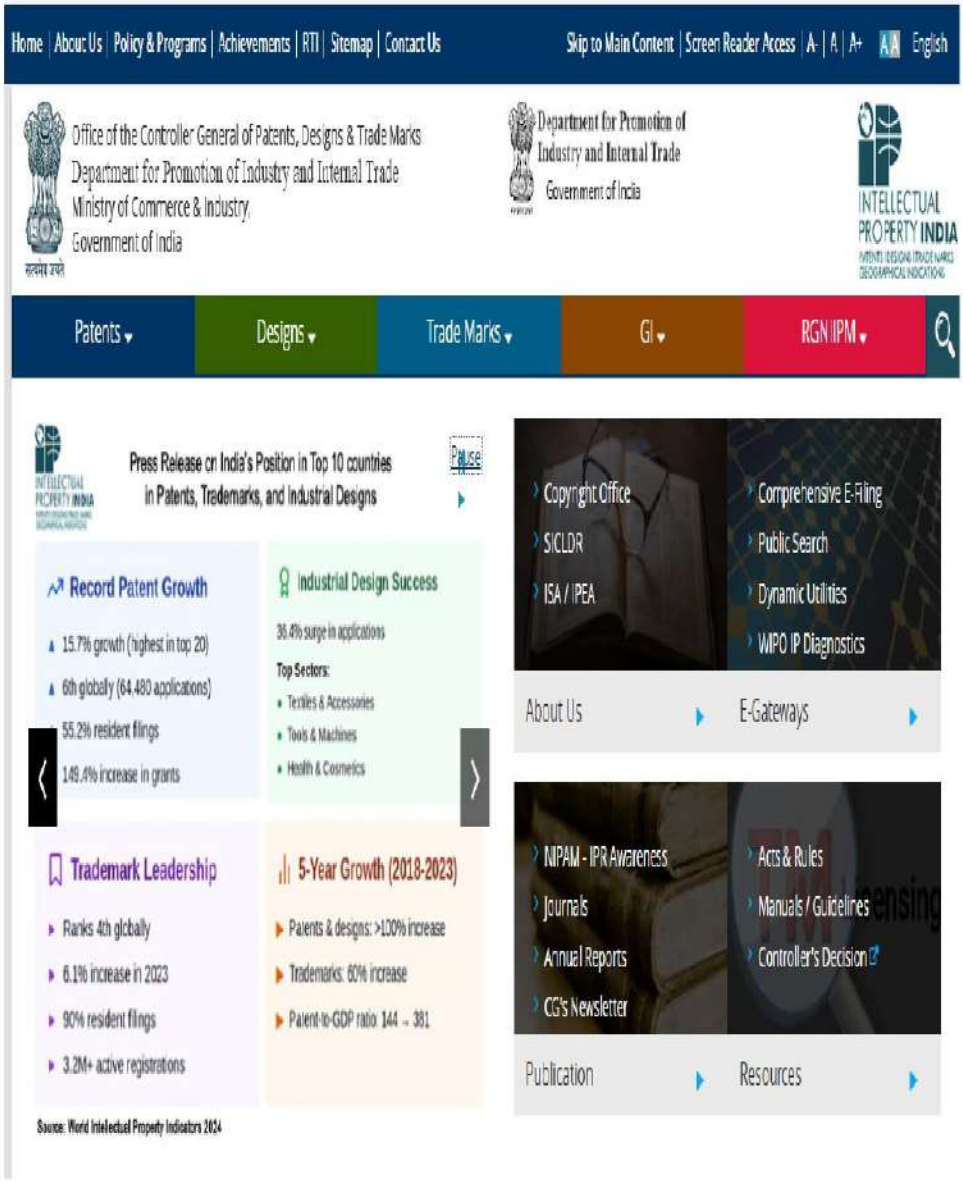
2. MATERIALS AND METHODS

The algal samples were collected from Tenneti park with latitude 17.7477° N and longitude 83.3506° E with a vast rocky shore with algal growth.

2.1 Sample Collection

The samples are collected from tenneti beach Visakhapatnam. Two types of algal samples were collected in the month of May during summer season aseptically by using gloves and fore-ceps in to clean and grease free bottles. The algal sample analyzed at the spot by using google lens to identify the genes. Collected samples were carried to the microbiology lab, St. Ann's college for women (Fig. 1).

8. Cover Page of International Property of India:



Principal
St.Ann's College for Women
Mallapuram, Visakhapatnam-11

Front Page of Paper:

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :21/04/2024

(21) Application No.202441031622 A

(43) Publication Date : 03/05/2024

(54) Title of the invention : NATURAL HERBAL SANITIZER: A CHEMICAL-FREE SOLUTION FOR HYGIENE

(51) International classification	:A61K0036534000, A01N0065280000, A01N0065000000, A61K0008974400, A61K0036886000
(86) International Application No Filing Date	:NA :NA
(87) International Publication No	: NA
(61) Patent of Addition to Application Number Filing Date	:NA :NA
(62) Divisional to Application Number Filing Date	:NA :NA

(71)Name of Applicant :

1)Shaik Valisha

Address of Applicant :Assistant Professor, Department of Chemistry, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh 530011, India ----------- -----

2)Dr. Sr. Prema Kumari

3)V. Anjali Devi

4)Maria Sundari

5)Ch. Rohini Kumari

6)Sanran Nisha Begum

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Shaik Valisha

Address of Applicant :Assistant Professor, Department of Chemistry, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh 530011, India ----------- -----

2)Dr. Sr. Prema Kumari

Address of Applicant :Principal of the College, Department of Botany, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---- -------- -----------

3)V. Anjali Devi

Address of Applicant :Assistant Professor, Department of Chemistry, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh 530011, India ----------- -----

4)Maria Sundari

Address of Applicant :Assistant Professor, Department of Chemistry, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh 530011, India ----------- -----

5)Ch. Rohini Kumari

Address of Applicant :B Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---- -------- -----------

6)Sanran Nisha Begum

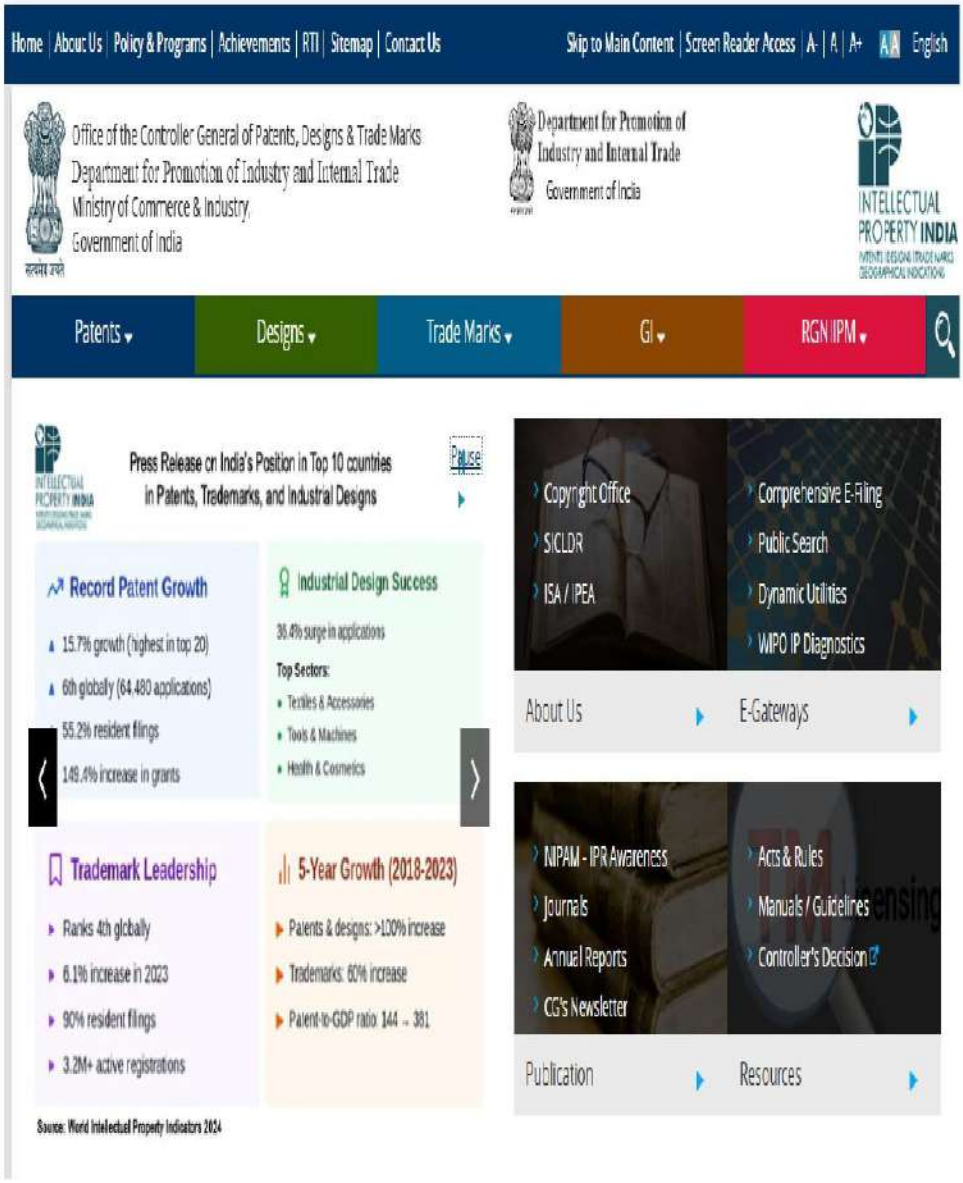
Address of Applicant :B Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---- -------- -----------

(57) Abstract :

The present invention discloses a natural herbal sanitizer, which represents a significant departure from conventional chemical-based sanitizers. Comprising herbal extracts, essential oils, carrier ingredients, and optional additives, this sanitizer offers a potent solution for disinfection without the use of synthetic chemicals. The formulation is carefully crafted to harness the antimicrobial properties of select botanical ingredients, including aloe vera, neem, tea tree, lavender, eucalyptus, peppermint, and thyme. Through a methodical blending process, the sanitizer achieves a delicate balance of efficacy and skin compatibility, making it suitable for personal, commercial, and healthcare applications. By eliminating synthetic additives, the sanitizer reduces the risk of skin irritation, allergic reactions, and environmental pollution, while promoting holistic wellness and environmental sustainability. This patent application provides a comprehensive overview of the composition, preparation method, advantages, and applications of the natural herbal sanitizer, underscoring its potential to redefine standards of hygiene practice in alignment with principles of efficacy, safety, and environmental stewardship. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 17 No. of Claims : 7

9. Cover Page of International Property of India:



Principal
St.Ann's College for Women
Mallapuram, Visakhapatnam-11

Front Page of Paper:

(12) PATENT APPLICATION PUBLICATION

(19) INDIA

(22) Date of filing of Application :22/04/2024

(21) Application No.202441031962 A

(43) Publication Date : 26/04/2024

(54) Title of the invention : WEALTHY WHEAT DROP: A SYSTEM FOR SUSTAINABLE WHEAT HARVESTING AND DISTRIBUTION

(51) International classification :G06Q0010080000, G06Q0010060000, G05D0001020000, G06Q0050280000, G05D0001000000

(86) International Application No :NA

Filing Date :NA

(87) International Publication No : NA

(61) Patent of Addition to Application Number :NA

Filing Date :NA

(62) Divisional to Application Number :NA

Filing Date :NA

(71)**Name of Applicant :**

1)Dr. Prasanthi Cheekurumelli

Address of Applicant :Associate Professor, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh 530011, India ---------- ----------

2)Dr. Sr. Prema Kumari

3)D. Dhana Santhoshi

4)A. Lakshmi Anusha

5)K. Gayatri

6)A. Lahari

7)S. P. Manideepika

8)S. Pravallika

9)G. Rebakha

10)K. Yamuna

11)K. Anjali

12)Sheik. Meera Jasmine

Name of Applicant : NA

Address of Applicant : NA

(72)**Name of Inventor :**

1)Dr. Prasanthi Cheekurumelli

Address of Applicant :Associate Professor, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh 530011, India ---------- ----------

2)Dr. Sr. Prema Kumari

Address of Applicant :Principal of the College, Department of Botany, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---------- ----------

3)D. Dhana Santhoshi

Address of Applicant :B. Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---------- ----------

4)A. Lakshmi Anusha

Address of Applicant :B. Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---------- ----------

5)K. Gayatri

Address of Applicant :B. Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---------- ----------

6)A. Lahari

Address of Applicant :B. Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---------- ----------

7)S. P. Manideepika

Address of Applicant :B. Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---------- ----------

8)S. Pravallika

Address of Applicant :B. Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---------- ----------

9)G. Rebakha

Address of Applicant :B. Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---------- ----------

10)K. Yamuna

Address of Applicant :B. Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---------- ----------

11)K. Anjali

Address of Applicant :B. Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---------- ----------

12)Sheik. Meera Jasmine

Address of Applicant :B. Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530011, India ---------- ----------

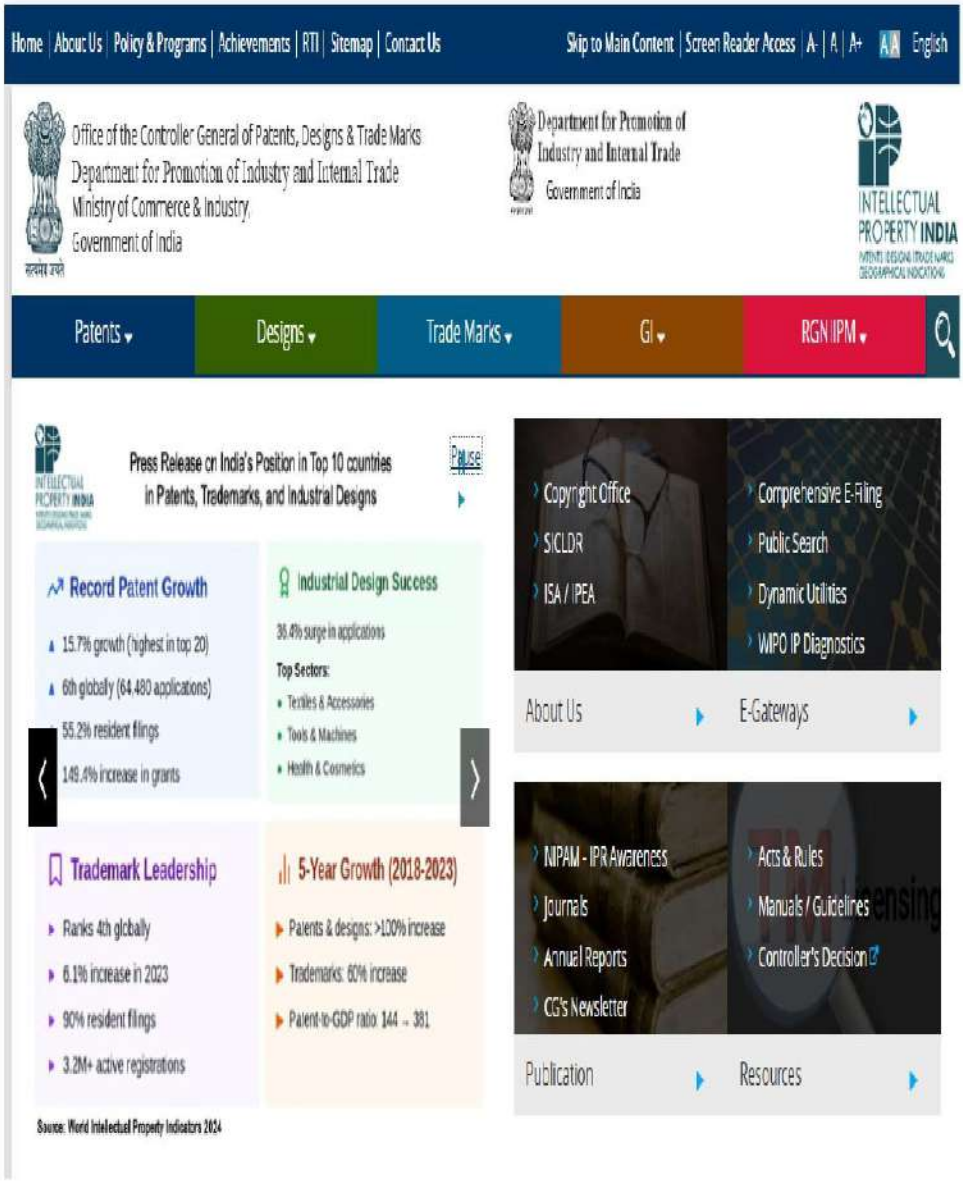
(57) Abstract :

The Wealthy Wheat Drop system presents a novel approach to wheat harvesting and distribution, integrating advanced technologies to enhance efficiency, sustainability, and equity in the process. Utilizing unmanned aerial vehicles (UAVs) equipped with specialized sensors and harvesting mechanisms, the system selectively harvests ripe wheat grains, minimizing waste and environmental impact. Autonomous ground vehicles transport the harvested wheat to distribution centers, where sorting and processing facilities ensure quality control. Through real-time monitoring and optimization, the system streamlines operations while promoting economic inclusivity and food security. The Wealthy Wheat Drop system represents a significant advancement in agricultural practices, offering a scalable solution for sustainable wheat production and distribution. Accompanied Drawing [FIGS. 1-2]

No. of Pages : 17 No. of Claims : 6

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-53

10. Cover Page of International Property of India:



Principal
St.Ann's College for Women
Mallapuram, Visakhapatnam-11

Front Page of Paper:

(12) PATENT APPLICATION PUBLICATION
(19) INDIA
(22) Date of filing of Application :24/04/2024

(21) Application No.202441022325 A
(43) Publication Date : 03/05/2024

(54) Title of the invention : METHOD AND SYSTEM FOR MICRO-SCALE DEHYDRATION OF VEGETABLES

(51) International classification : B29K0105/000000, C07C9/00124/0000, A23B0007/02004; B01D0053260000, A23L0019/000000
(86) International Application No : NA
Filing Date : NA
(87) International Publication No : NA
(61) Patent of Addition to Application Number : NA
Filing Date : NA
(62) Divisional to Application Number : NA
Filing Date : NA

(71) Name of Applicant :
1)Dr. Prasanthi Cherkarumelli
Address of Applicant :Assistant Professor, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....
2)Dr. Sr. Prema Kumari
3)Raja Akkarabeyina
4)G. Likitha
5)K. Sushma Swaraj
6)K. Ujwala
7)C. Dhanalakshmi
8)D. Latha Sree
9)M. Sharmila Deepika
10)D. Kavana
11)R. Cenchika
12)Sanjana Kumari
Name of Applicant : NA
Address of Applicant : NA
(72) Name of Inventor :
1)Dr. Prasanthi Cherkarumelli
Address of Applicant :Assistant Professor, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....
2)Dr. Sr. Prema Kumari
Address of Applicant :Principal of the College, Department of Botany, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....
3)Raja Akkarabeyina
Address of Applicant :Assistant Professor, Department of English, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....
4)G. Likitha
Address of Applicant :B.Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....
5)K. Sushma Swaraj
Address of Applicant :B.Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....
6)K. Ujwala
Address of Applicant :B.Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....
7)C. Dhanalakshmi
Address of Applicant :B.Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....
8)D. Latha Sree
Address of Applicant :B.Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....
9)M. Sharmila Deepika
Address of Applicant :B.Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....
10)D. Kavana
Address of Applicant :B.Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....
11)R. Cenchika
Address of Applicant :B.Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....
12)Sanjana Kumari
Address of Applicant :B.Sc Student, Department of Microbiology, St. Ann's College for Women, Visakhapatnam, Andhra Pradesh, Pin code: 530013, India .....

(57) Abstract :
The present invention discloses a method and system for micro-scale dehydration of vegetables, which facilitates the preservation and extended shelf life of vegetables while retaining their nutritional value and flavor. The method involves subjecting freshly harvested vegetables to controlled dehydration processes utilizing micro-scale technology. The system comprises a series of modular units for dehydration, each equipped with precise temperature and humidity control mechanisms to ensure optimal dehydration conditions. Additionally, the system incorporates novel airflow management techniques to enhance dehydration efficiency and reduce processing time. This invention offers a scalable and efficient solution for dehydrating vegetables at a micro-scale level, suitable for both commercial and household applications.
Accompanied Drawing [FIGS. 1-2]

No. of Pages : 19 No. of Claims : 8

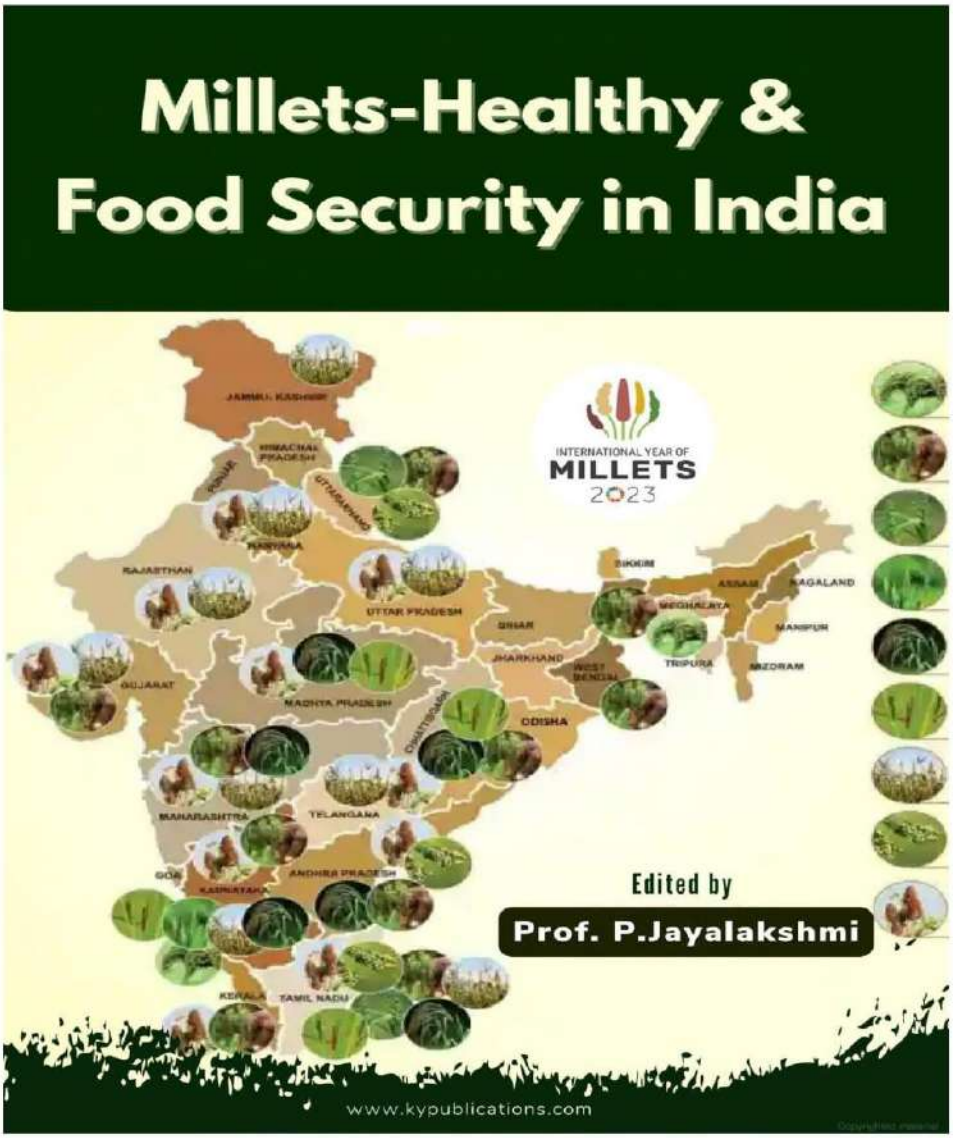
Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-11

Number of books and chapters in edited volumes/books published and papers published during the year.

Sl. No.	Name of the teacher	Title of the book/chapters published	Title of the paper	National / International	Year of publication
Number of chapters in edited volumes of books published - 06					
1	S. Lakshmi Tulasi	Millets-Healthy and Food security in India	Recent Changes in Production, Consumption and nutritional impact of millets in India	Nil	2023-2024
2	B. Santhi	Millets-Healthy and Food security in India	Assessment of utilization of millets and management of diabetes mellitus- A study in visakhapatnam city AP	Nil	2023-2024
3	B.P. Raju	Millets-Healthy and Food security in India	Startups making millets popular marketing in India	Nil	2023-2024
4	A. AdiLakshmi	Vurdha Vimarsha	Hindi katha sahithya may vrudho ki samasaya	International	2023-2024
5	Dr. Ch. Prasanthi	Research Methodology for Social Sciences	Hand Book of Research Methodology for Social Sciences	Nil	2023-2024
6	Dr. Jayasri Puli	Current Scenario of Women Empowerment	Current Scenario of Women Empowerment	Nil	2023-2024

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-11

1. Cover Page of the Millets-Healthy and Food security in India:



Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-53

Chapter Published in edited volume of the book:

Chapter-13

Recent Changes in Production, Consumption and Nutritional impact of millets in India

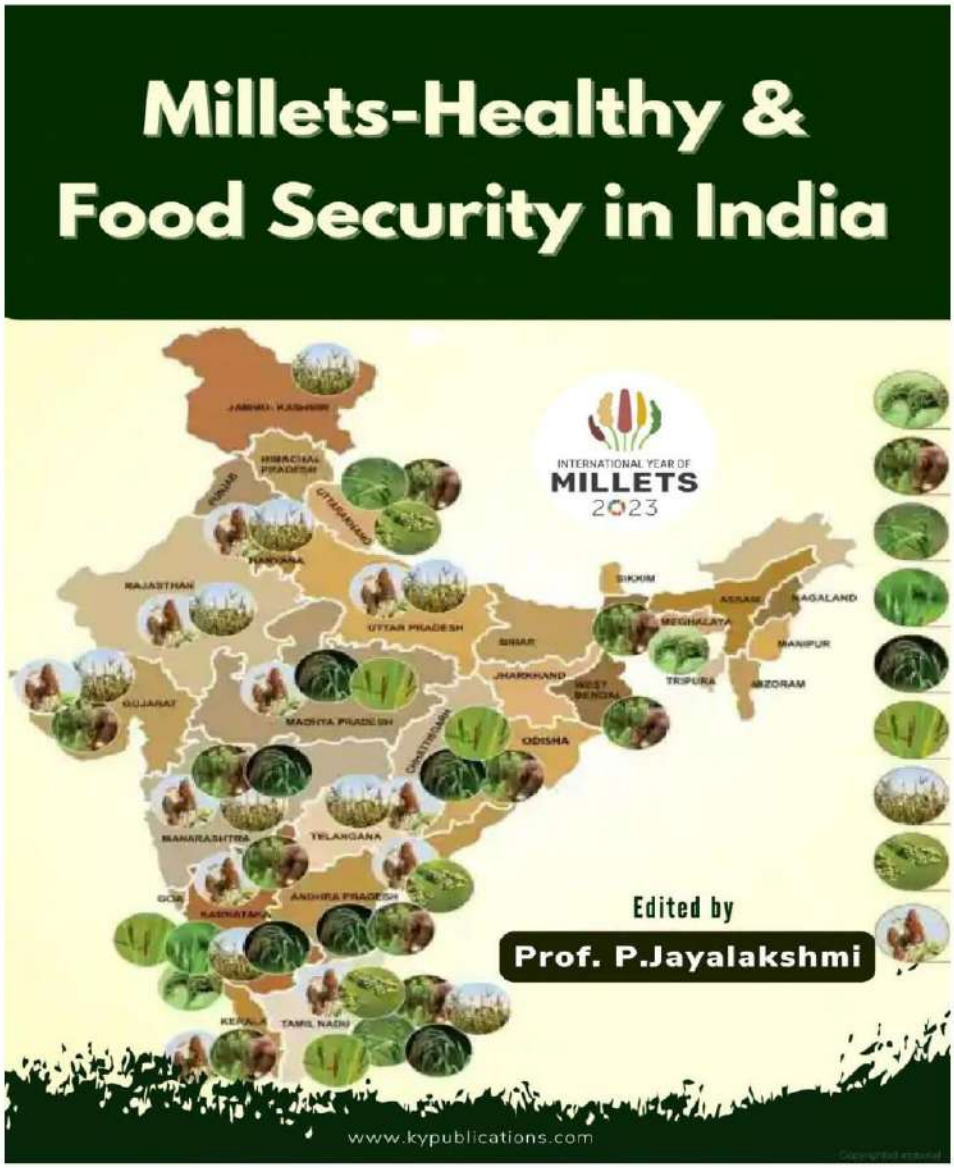
Lakshmi Tulasi Seeram

Abstract

Millets are a group of small-seeded grains that have been consumed in India for centuries. Recently, there has been a renewed interest in the production and consumption of millets due to their numerous health benefits, including being a rich source of dietary fiber, protein, and essential minerals. This paper explores the recent changes in the production, consumption, and nutritional impact of millets in India. It provides an overview of the current state of millet production in India, the factors driving the increase in production, and the challenges faced by millet farmers. The paper also examines the changing patterns of millet consumption in India, including the shift from traditional millet-based diets to more processed and refined food products. Finally, the paper discusses the nutritional impact of millets on Indian diets, highlighting the potential for millets to contribute to improved health outcomes. Overall, the paper argues that millets have the potential to play an important role in addressing India's nutritional challenges and promoting sustainable agriculture.

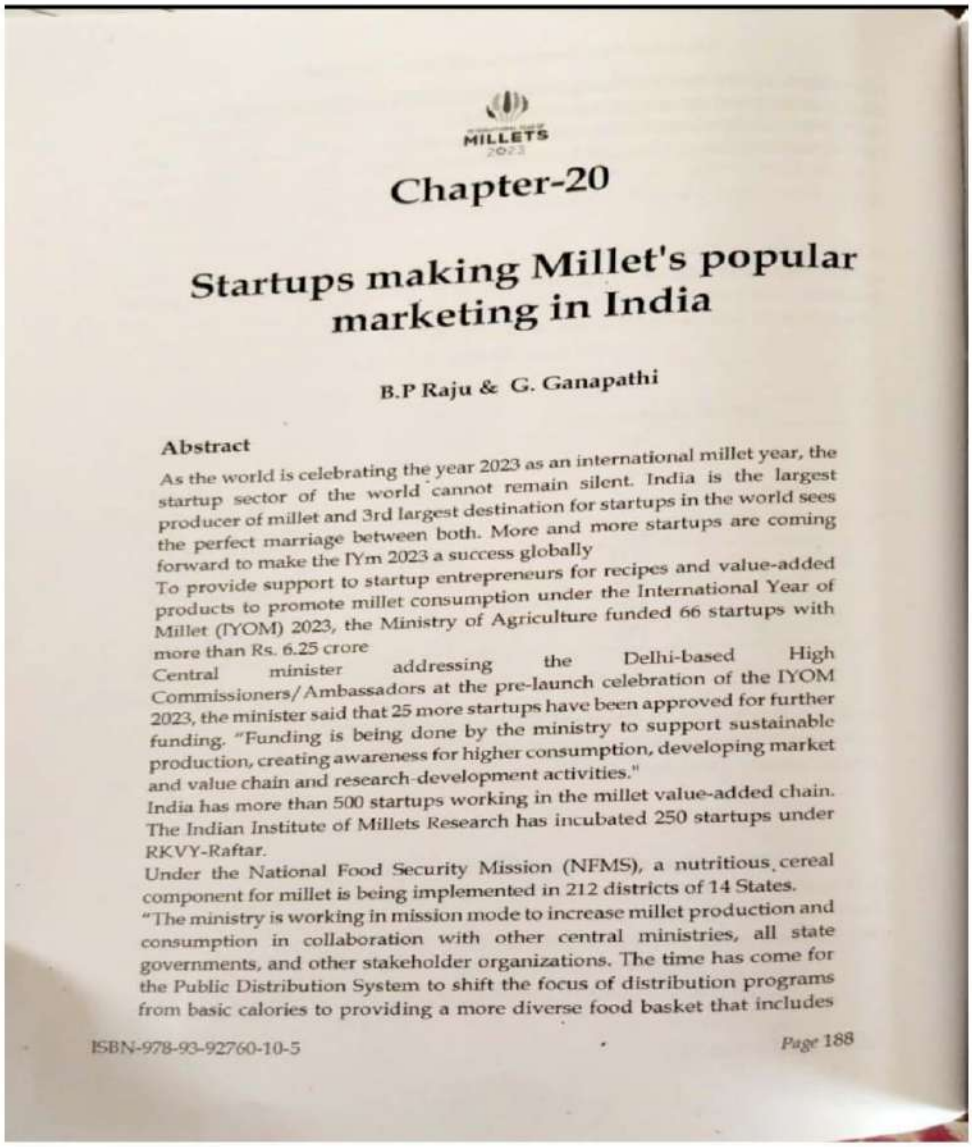
ISBN-978-93-92760-10-5

2. Cover Page of the Millets-Healthy and Food security in India:



Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-15

Chapter Published in edited volume of the book:



MILLETS 2023

Chapter-20

Startups making Millet's popular marketing in India

B.P Raju & G. Ganapathi

Abstract

As the world is celebrating the year 2023 as an international millet year, the startup sector of the world cannot remain silent. India is the largest producer of millet and 3rd largest destination for startups in the world sees the perfect marriage between both. More and more startups are coming forward to make the IYm 2023 a success globally

To provide support to startup entrepreneurs for recipes and value-added products to promote millet consumption under the International Year of Millet (IYOM) 2023, the Ministry of Agriculture funded 66 startups with more than Rs. 6.25 crore

Central minister addressing the Delhi-based High Commissioners/Ambassadors at the pre-launch celebration of the IYOM 2023, the minister said that 25 more startups have been approved for further funding. "Funding is being done by the ministry to support sustainable production, creating awareness for higher consumption, developing market and value chain and research-development activities."

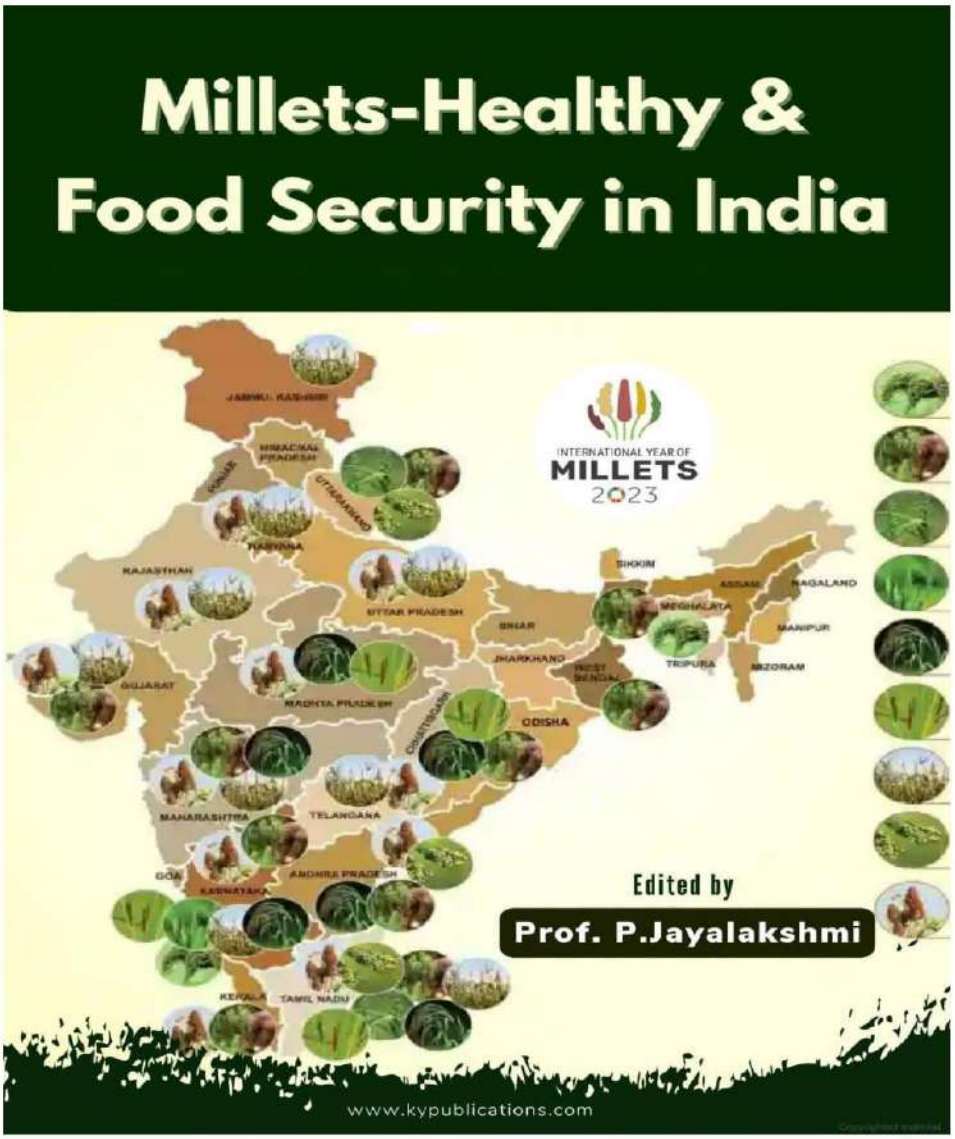
India has more than 500 startups working in the millet value-added chain. The Indian Institute of Millets Research has incubated 250 startups under RKVY-Raftar.

Under the National Food Security Mission (NFMS), a nutritious cereal component for millet is being implemented in 212 districts of 14 States.

"The ministry is working in mission mode to increase millet production and consumption in collaboration with other central ministries, all state governments, and other stakeholder organizations. The time has come for the Public Distribution System to shift the focus of distribution programs from basic calories to providing a more diverse food basket that includes

ISBN-978-93-92760-10-5

3. Cover Page of the Millets-Healthy and Food security in India:



Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-15

Chapter Published in edited volume of the book:

MILLETS 2023

Chapter-17

Assessment of Utilization of millets and Management of Diabetes mellitus– A study in Visakhapatnam City, AP.

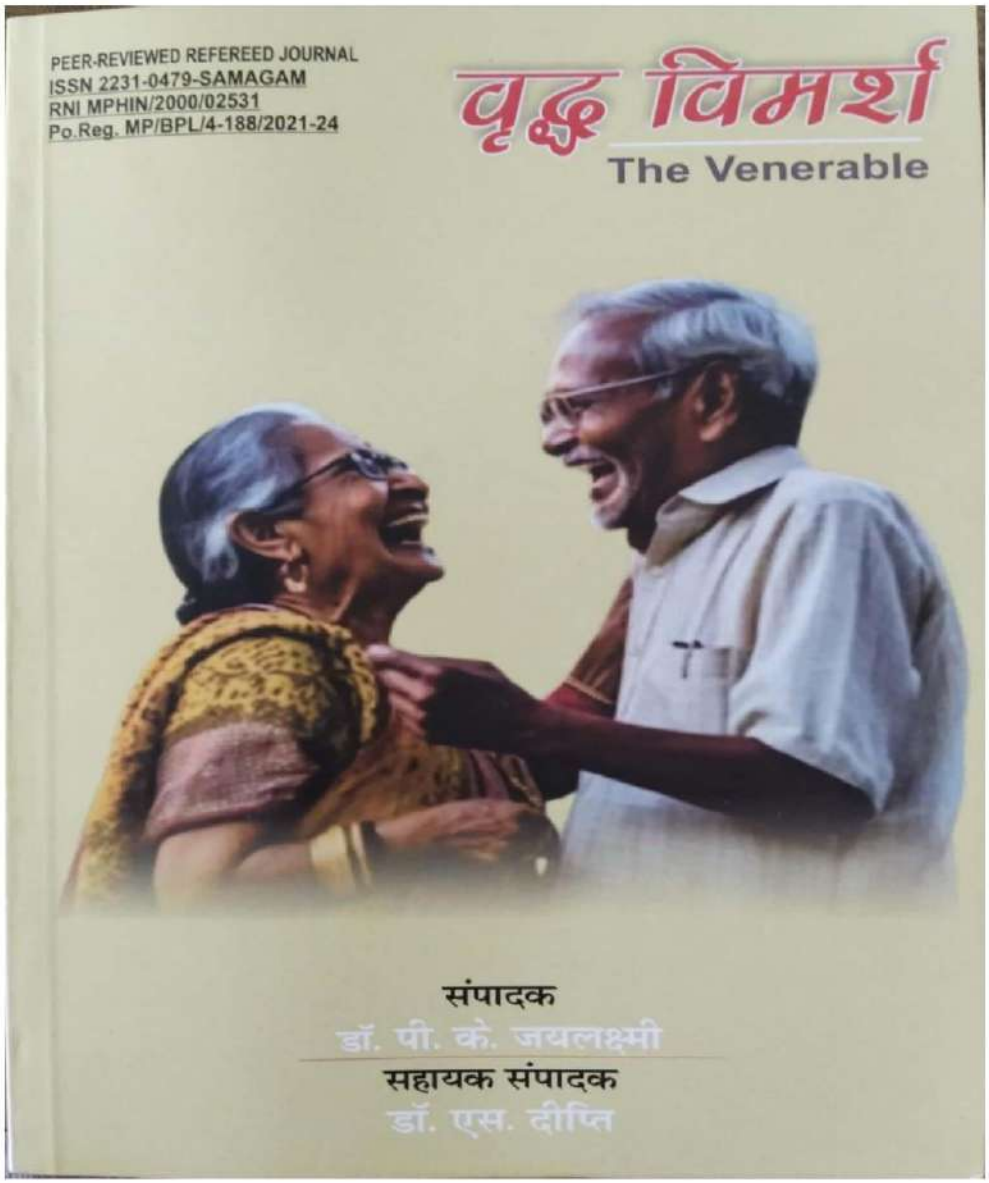
Prof. P. Jayalakshmi & B. Santhi B.P.Raju

Abstract

Historically, millets have a significant role in the traditional diets of many regions throughout the world. There is evidence showing millet foods and beverages have functional and health promoting effects, specifically anti-diabetic, anti-obesity, cardiovascular disease, due to the actions of these phytochemicals and play a role in the body's immune system. Millets do not require pesticides, according to traditional growing methods and the land used for growing millets is totally pest free. Millets are the best food for diabetes. Carbohydrates are very less in millets and also high strength to the body. In 2010, the National Institute of Nutrition assessed Glycaemic Index (GI) of Sorghum based foods in collaboration with the Indian Institute of millets Research Hyderabad, under National agricultural Innovation Project (NAIP). The results showed that Sorghum based foods are having low GI and reduces the post prandial blood glucose level. Finger millet diets showed low glycaemic response due to high fibre content. The present study focussed on the awareness on utilization of millets and the management of diabetes among (selected sample respondents) the diabetic persons in the city of Visakhapatnam, Andhra Pradesh. The sample 112 is randomly selected from four zones (East, North, South and West) 28 from each. The authors used both primary and secondary sources of data for study. The primary data were collected through personal interaction and the secondary data were collected through books, Journals, Websites, News

ISBN-978-93-92760-10-5

4. Cover Page of the Vurdha Vimarsha:



Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-53

Chapter Published in edited volume of the book:

हिन्दी कथा साहित्य में वृद्धों की समस्याएं

ए. आदिलक्ष्मी
प्राध्यापिका
सेइन्ट आन्स महिला कलाशाला
मल्कापुरम, विशाखपट्टणम

प्रस्तावना : 'वृद्धावस्था' यानि जीवन की संध्या की अवस्था। इस अवस्था के पूर्वार्ध तक लोग परिवार की जरूरतें पूरा करने में व्यस्त रहते हैं। सारी जिम्मेदारियां पूरी होने के बाद, जब अपने आपको मुक्त समझने लगते हैं, इतने में वृद्धावस्था का आगमन हो जाता है।

आज की स्थिति में हर एक परिवार में बुजुर्गों का होना अत्यावश्यक है, क्योंकि उनके अनुभवों के द्वारा हम बहुत कुछ सीखकर, आत्म विश्वास के साथ-साथ अच्छे संस्कार भी प्राप्त कर सकते हैं। वे वट वृक्ष के समान होते हैं, जिनकी छाया में आश्रित हम निडर होकर अपने जीवन की उलझनों व थकावट, भूल सकते हैं। यह सत्य है कि जीवन में प्रौढ़ता के बाद वृद्धावस्था का आगमन होना अनिवार्य है। इस अवस्था में वृद्ध अनुभवी होने के साथ-साथ मानसिक व सामाजिक रूप से दृढ़ बन जाते हैं लेकिन शारीरिक रूप से कमजोर हो जाते हैं। अगर घर के सदस्य उन लोगों का आदर करते हुए उनके अनुभवों से सलाह लें, तो हर कार्य में सफलता प्राप्त कर सकते हैं। इससे सचमुच हर घर में उजाला छा जाएगा।

5. Certificate of Text book:

Ryan Publishers

Publishing your Passion

Address: B-3, Lakshmi Pride, 80 feet road, 10th Cross West, Thillainagar, Trichy, 620018, Tamil Nadu, India.
+91 637 4651101
editor@ryanpublishers.co.in
chairman@ryanpublishers.co.in
Website: www.ryanpublishers.co.in

Date: 22/3/2024

To,

Dr. Prasanthi Cheekurumelli,
Associate Professor,
Department of Microbiology,
St. Ann's college for women,
Malkapuram, Visakhapatnam.

Dear Madam,
Sub: **Certificate of Appreciation**

This is to certify that **Dr. Prasanthi Cheekurumelli** has acted as an chief editor for the book entitled "**HANDBOOK OF RESEARCH METHODOLOGY FOR SOCIAL SCIENCES VOLUME III**" with ISBN: **978-81-19587-18-6** under Ryan Publishers. We appreciate her thoughtfulness, creativity and effort towards this accomplishment.

Yours faithfully,

RYAN PUBLISHERS TRICHY INDIA

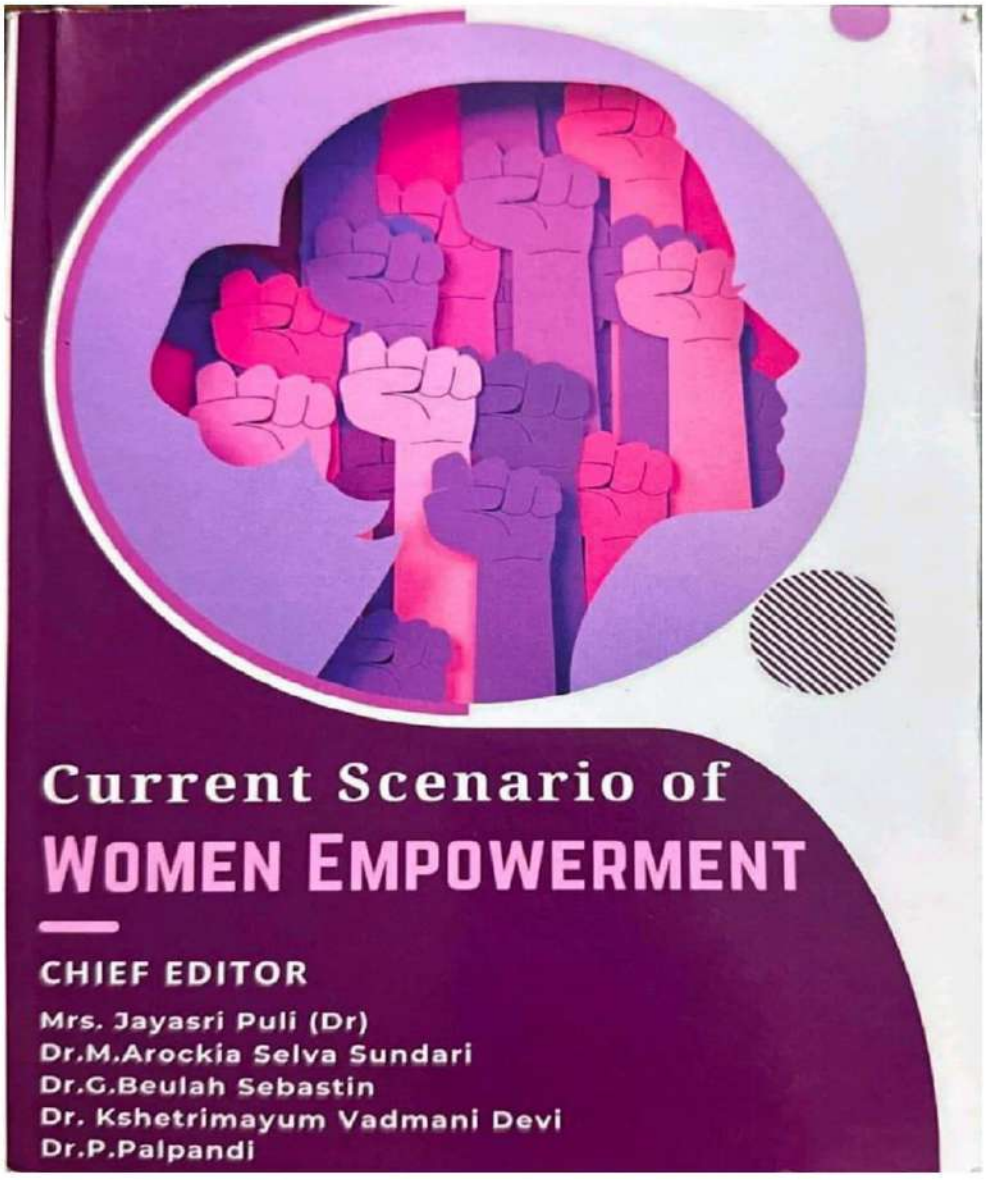
Dr. P.F. Steffi
Editor-in-Chief

Bipin Joseph
Chairman

Follow us on:-

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-15

6. Coverpage of the Text book:



Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-1

Certificate of the text book:

Ryan Publishers

Publishing your Passion

Address: B-3, Lakshmi Pride, 80 feet road, 10th Cross West, Thillainagar, Trichy, 620018, Tamil Nadu, India.
+91 637 4651101
editor@ryanpublishers.co.in
chairman@ryanpublishers.co.in
Website: www.ryanpublishers.co.in

Date: 28/3/2024

To,

Mrs. Jayasri Puli (Dr),
Academic Head/Assistant Professor,
Department of Commerce & Management,
St Ann's College for Women, Visakhapatnam,
Andhra Pradesh.

Dear Madam,

Sub: **Certificate of Appreciation**

This is to certify that **Mrs. Jayasri Puli (Dr)** has acted as an chief editor for the book entitled "**CURRENT SCENARIO OF WOMEN EMPOWERMENT**" with ISBN: **978-81-19587-86-5** under Ryan Publishers. We appreciate her thoughtfulness, creativity and effort towards this accomplishment.

Yours faithfully,

Dr. P.F. Steffi
Editor-in-Chief

RYAN PUBLISHERS TRICHY INDIA

Bipin Joseph
Chairman

Follow us on:-

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-11

Ongoing Innovative research Projects

MUSHROOM CULTIVATION PROJECT

Minutes of Meeting
Program Title: Mushroom Cultivation
Date: September 25, 2023
Venue: Chemistry Lab
Organizers: Chemistry Faculty
Participants: 30 students (3rd B.Sc. MB & MPC)

Agenda:

1. Introduction to Mushroom Cultivation
2. Objectives and Benefits
3. Step-by-Step Procedure
4. Challenges and Solutions
5. Planning and Execution
6. Expected Impact and Feedback

Meeting Proceedings:

1. **Welcome & Introduction:**
   - The meeting was initiated by the Chemistry Faculty, welcoming all students and briefing them on the significance of mushroom cultivation.
   - The importance of mushrooms in nutrition, medicine, and sustainable agriculture was highlighted.
2. **Objectives & Benefits Discussed:**
   - The primary goal was to provide hands-on experience in mushroom cultivation techniques.
   - Nutritional, medicinal, economic, and environmental benefits were explained.
3. **Step-by-Step Procedure Explained:**
   - Faculty members elaborated on the preparation of substrates (straw, compost, wood chips).
   - Techniques for inoculation, incubation, fruiting, and harvesting were demonstrated.
   - Students were given insights into maintaining temperature, humidity, and pest control.
4. **Challenges and Possible Solutions Discussed:**
   - **Contamination Risks:** Solution: Proper sterilization of the substrate.
   - **Climate Control Issues:** Solution: Monitoring humidity and temperature using controlled setups.

Principal
St.Ann's College for Women
Mehdipatnam, Visakhapatnam-17

- **Pest Management:** Solution: Implementing Integrated Pest Management (IPM) techniques.

5. **Planning & Execution Strategy:**
   - The cultivation would be carried out over 2.5 months under close supervision.
   - Students were divided into small teams for different tasks such as substrate preparation, inoculation, and monitoring.
   - Regular progress checks were scheduled.
6. **Expected Impact:**
   - Hands-on experience in mushroom farming techniques.
   - Awareness of sustainable agriculture and waste management.
   - Economic opportunities for students interested in agribusiness.
7. **Feedback & Conclusion:**
   - Students expressed enthusiasm and eagerness to participate.
   - Faculty emphasized the importance of precision and care in the cultivation process.
   - The session concluded with an open discussion and a vote of thanks.

Meeting Adjourned: The session concluded with a mutual agreement on the next steps and responsibilities.

Principal
St. Ann's College for Women
Malkapuram, Visakhapatnam

REPORT ON THE MUSHROOM CULTIVATION PROJECT

Title of the Program : Mushroom Cultivation

Organizing Department / Cell : Department of Chemistry

Date/Duration : 25th September,2024.

Number of Participants: 30 Students.

Abstract

Mushroom cultivation is a complex process that involves the optimization of various environmental and nutritional factors to promote healthy growth and maximize yields. This report provides an overview of the current state of mushroom cultivation, including the key factors that influence mushroom growth, the most commonly cultivated species, and the latest advances in mushroom cultivation technology.

Introduction

Mushrooms are a type of fungi that have been cultivated for centuries for their nutritional and medicinal value. With the increasing demand for mushrooms worldwide, mushroom cultivation has become a significant industry, with many countries investing heavily in research and development to improve cultivation techniques and increase yields.

Key Factors Influencing Mushroom Growth

1. *Substrate*: The substrate is the material on which the mushrooms are grown. Common substrates include straw, compost, and wood chips.

2. *Temperature*: Temperature is a critical factor in mushroom growth, with different species having optimal temperature ranges.

Principal
St.Ann's College for Women
Mallapuram, Visakhapatnam

3. *Humidity*: Maintaining optimal humidity levels is essential for mushroom growth, with most species requiring a humid environment.

4. *Light*: Light is another important factor, with some species requiring light to grow, while others prefer darkness.

5. *Nutrients*: Mushrooms require a range of nutrients to grow, including carbon, nitrogen, and minerals.

Most Commonly Cultivated Species

1. *Button Mushroom (Agaricusbisporus)*: This is one of the most widely cultivated mushroom species, known for its mild flavor and soft texture.

2. *Oyster Mushroom (Pleurotusostreatus)*: This species is popular for its fast growth rate and delicate flavor.

3. *Shiitake Mushroom (Lentinula edodes)*: This species is native to East Asia and is prized for its rich, smoky flavor.

Advances in Mushroom Cultivation Technology

1. *Automated Climate Control*: Modern mushroom cultivation facilities use automated climate control systems to maintain optimal temperature, humidity, and light levels.

2. *Substrate Pasteurization*: Pasteurization of the substrate is essential to eliminate pests and diseases. Modern facilities use advanced pasteurization techniques, such as steam sterilization.

3. *Integrated Pest Management*: Integrated pest management (IPM) strategies are used to minimize the use of chemical pesticides and maintain a healthy environment.

Conclusion

Mushroom cultivation is a complex process that requires careful attention to detail and a deep understanding of the factors that influence mushroom growth. By optimizing substrate, temperature, humidity, light, and nutrient levels, mushroom cultivators can promote healthy growth and maximize yields. The latest advances in mushroom cultivation technology, including automated climate control, substrate pasteurization, and integrated pest management, have significantly improved the efficiency and sustainability of mushroom cultivation.

MUSHROOM CULTIVATION

Mowing

Replenishing

Boiling

Steaming

Drying Up

Dry Check

Implantation

Sowing

Nurturing

Germination

Week-1

Week-2

Week-3

Week-4

Week-5

Week-6

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

Week-7

Week-8

Week-9

Week-10

Week-11

Week-12

ORGANIC HUB PROJECT

Minutes of Meeting

Project: Organic Hub Project
Date: 22nd February,2024.
Venue: Microbiology Lab
Attendees: 2nd Bsc(MB) students
Chairperson: Dr.Ch.Prasanthi - HOD of Microbiogy.

Agenda:

1. Introduction and Overview of the Nursery
2. Goals of the Nursery
3. Setup and Execution
4. Planting Process
5. Growth and Maintenance
6. Challenges and Solutions
7. Educational Impact
8. Future Recommendations
9. Conclusion and Next Steps

Meeting Proceedings:

1. Introduction and Overview of the Nursery

- Discussed the role of nurseries in plant propagation and sale.
- Highlighted the importance of herbs in medicine and cuisine.
- Discussed the nutritional benefits of selected herbs.

2. Goals of the Nursery

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-1

- Emphasized the importance of growing high-quality plants.
- Discussed employment opportunities through organic farming.
- Highlighted the significance of optimizing plant growth and maintaining uniformity.

3. Setup and Execution

- Discussed site selection criteria: soil quality, water availability, climate.
- Soil testing and land acquisition requirements were reviewed.
- Soil preparation methods were discussed, including organic manure, mulch, and crop residue.

4. Planting Process

- Reviewed various steps: site cleaning, stone picking, soil restoration, mulching, and seed plantation.
- Emphasized water conservation and nutrient addition.

5. Growth and Maintenance

- Discussed plant growth stages for Gongura, Thotakura, and Menthukura.
- Covered care routines such as compost incorporation, watering, weeding, and pest control using Neem water.
- Highlighted potential environmental challenges affecting plant growth.

6. Challenges and Solutions

- Identified frequent pest attacks as a major issue.
- Proposed natural pesticide solutions like Neem and Bitter leaf sprays.
- Discussed climate change effects on soil quality, water management, and pest control.

7. Educational Impact

- Students learned about organic farming practices, soil fertility management, and environmental impact.
- Gained practical experience in crop cultivation and organic pest control.

8. Future Recommendations

- Emphasized continued use of natural pesticides.
- Encouraged afforestation and promoting plant survival in urban areas.
- Recommended daily watering, fencing, and pest control measures.

9. Conclusion and Next Steps

- Recognized the benefits of growing Sorrel and Amaranthus in an organic HUD system.
- Planned for ongoing monitoring and optimization of growing conditions.
- Scheduled the next review meeting to assess progress and improvement.

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-1

REPORT ON THE ORGANIC HUB PROJECT

INTRODUCTION:

OVERVIEW OF THE NURSERY:

A nursery is a place where plants are propagated and grown to a desired size. Some nurseries specialize in certain areas, which may include: propagation and the selling of
Small or bare root plants too the nurseries; growing out plant materials to as a liable size, or retail sales. Herbs are used for medicinal purposes for thousands of years. In many
Delicious cuisines, dietary herbs are used to increase the taste and favour of foods. Recent years reports revealed that herbs contribute as dietary nutrients, which are known to
Possess a number of beneficial health properties.

In this article, we discuss the three important herbs that are commonly use dinour cuisines world wide to determine the true benefits of these herbs from a health view point.

GOALS OF NURSERY:

The main objective of the nursery is to grow plants in an open environment, maintain a good quality of plants and protect the plants from pests and diseases.

Some of them, which includes are:
1.Growing high-quality plants
2.Optimizing plant growth.
3.Providing a source of saplings.
4.Creating employment opportunities.
5.Growing small seeds.

Maintaining a uniform stand.

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-1

SETUP AND EXECUTION:

SITE SELECTION:

There is no fixed minimum land area required for organic farming it can even be done on a rooftop, it can vary depending on the type of crops being cultivated, the specific farming practices being used, and the local climate and soil conditions. The development of organic agriculture requires a suitable location. However, sometimes, suitable land is very limited. This study aims to select the site for the development of organic agriculture, as well as to function in overcoming the existence of critical land.

Select a Suitable Location:

Choose a location with suitable soil and climate conditions for organic farming. The availability of water and proximity to markets should also be considered.

Land Acquisition and SoilTesting:

Acquire or lease land that is free from contamination and has fertile soil.

What are the factors inffuencing site selectionforaparticularcrop?

The environmental factors influencing the extent of arable land are terrain, climate, soil properties, and soil water.Crops need space to grow, sufficient light, warmth, and
moisture. Soil must be of sufficient depth with sufficient drainage, texture, and chemical and fertility properties.

SOIL PREPARATION:

Here are some of the ways to prepare soil for organic gardening:

1. Soil testing:
   Get a soil test to learn your soil's texture, pH level, and nutrient content.
2. Use organic manure:
   Manure improves soil quality by increasing humus and water holding capacity, and providing nutrients to plants.
3. Use mulch:
   Organic mulch helps prevent weeds, conserve soil, and add nutrients as it breaks down.
4. Use cover crop:
   Cover crops, also called green manure crops, add organic matter to the soil and
   protect it from erosion.
5. Use crop residue:
   Crop residue, such as roots, stems, leaves, and chaff, improves soil prope
   water storage and infiltration.
6. Control weeds:
   Use cultivation, such as hoeing, to control annual weeds.
7. Reduce soil compaction:
   There are many ways to reduce soil compaction, but you should learn n
   good soil management practices for your specific situation.
8. Soil amendments:
   Such as composted manure, limestone, rockdust, and supplementary sources of nitrogen, phosphorus, potassium and micro-nutrients.

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam

PLANTING PROCESS:

Planting process is followed by various steps, which includes:

- **Site Cleaning**: Using less toxic cleaning products that are safe. Cleaning methods and products with environmentally friendly ingredients and procedures which are designed to preserve human health and environmental quality.
- **Stone picking:** The most common method for picking is to cut off the outer leaves about two inches above the ground while they are young and tender.
- **Addition of soil:** Adding soil, or soil amendments, to a plantation can improve soil quality and plant health:
- **Soil restoration:** Adding soil can restore degraded grasslands, especially when large amounts of soil are added.
- **Mulching:** Mulching can be an effective way to help leafy green vegetables grow by controlling weeds, conserving water, and adding nutrients to the soil.
- **Water Conservation**: Mulch helps conserve water at the root level.
- **Nutrient Addition:** Organic and natural mulches add nutrients to the soil as they breakdown.
- **Seed Plantation:** Seeds of leafy vegetables can be sown directly in the soil, but care should be taken to ensure the depth for proper germination. Avoid planting leafy vegetables in sandy or heavy clay soil as leafy vegetables want nitrogen for growth, and it is better to do a soil analysis before tying fertilisers.

GROWTH AND MAINTENANCE:

Summary of plant growth stages:

There are three different kinds of green leafy vegetables which we have selec

1. Gongura
2. Thotakura
3. Menthukura

1. Growth stages of Gongura:

- Gongura seeds can be sown directly in raised beds, or in containers.
- Gongura seeds will germinate within the first 5 days or even earlier.
- After 25-30 days the Gongura will be ready to harvest.

2. Growth stages of Thotakura:

- Thotakura seeds will be sown directly into the soil.
- Make sure the plant receives enough nitrogen.
- It will take only three weeks for thotakora to grow into a fresh leafy plant.
- When you harvest the plant, cut from one or two inches above to keep the roots intact.

3. Growth stages of Menthukura:

- Firstly, the fenugreek seeds are been soaked overnight and then, next day the seeds will be sowed into the soil.
- Germination: Seeds will germinate with in first six days or even much earlier and tiny seedlings will be visible with first leaves.
- Baby Methi plants will be visible in 10days.
- Mature leaves will be ready to harvest in 3-4 weeks.

Care Routines:

Green leafy vegetables like Gongura, Thotakura, Menthukura are relatively high in antioxidants, vitamins, and minerals making the main important part of home and community gardens.

The caring measures should be followed are:

- Firstly, Incorporate compost into the soil before planting.
- Watering – Regular watering is required for succulent, fast-growing crops.
- Weeding – Hand-pull weeds or cut them at the soil line with a sharp hoe. Spread an organic mulch around plants to prevent weed germination and conserve soil moisture.
- Pesticide – To prevent the insects infestation of plant, add boiled Neem leaves water as a pesticide to eliminate them.

Challenges Faced:

Plant growth and geographic distribution (where the plant can grow
environment. If any environmental factor is less than ideal, it limits a plant's g

For example: Only plants adapted to limited amounts of water can live in des
Either directly or indirectly, most plant problems are caused by environm
environmental conditions (e.g.,too little water) damage a plant directly.

In other cases, environmental stress weakens a plant and makes
insect attack. Environmental factors that affects the plant growth which in
humidity and nutrition. It's important to understand how these factors affect plant growth and development.

OUT COMES:

THOTAKURA (AMARANTHUS):

Outcome in organic HUD (Hydroponic Underground Dome) system:

Yield:

- Leaf production: 250-350 grams per plant per harvest (every 25-30 days).
- Seed production: 700-1000 grams per plant per season.
- Harvest cycles: 5-7 cycles per year.

Benefits:

- Increased protein content (15-20%).
- Improved leaf quality (larger, tender leaves).
- Extended harvest season (continuous production).
- Water efficiency (upto 50% water savings).
- Reduced land use (vertical growing).

Nutritional Analysis (per100g):

1. Protein : 15-20g.
2. Fiber : 5-7g.
3. Iron : 5-7mg.
4. Calcium : 200-300mg.
5. VitaminC : 50-70mg.

Pest and Disease Management:

- Aphids : Neem oil, insecticidal soap.
- Whiteffies: Yellow sticky traps, neem oil.
- Fungal infections: Crop rotation, fungicides (organic).

HUD System Requirements:

1. Temperature: 20-25°C (c8-77°F).
2. Humidity: 50-60%.
3. Lighting: 12-14 hours supplemental LED.
4. Nutrients: Balanced NPK (10:10:10) with micro nutrients.
5. Soil less mix: Coconut coir or peat moss-based.

MENTHULU:

Also known as Mentha or Mint outcome in organic HUD (Hydroponic U

Yield:

- Leaf production : 300-400 grams per plant per harvest (every 20-25 days).
- Harvest cycles : 6-8 cycles per year.
- Essential oil production : 100-150 ml per plant per season.

Benefits :

1. Improved leaf quality (larger, more aromatic leaves).
2. Increased essential oil content (1-2%higher).
3. Extended harvest season (continuous production).
4. Water efficiency (upto 50% water savings).
5. Reduced land use (vertical growing).

Nutritional Analysis (per100g): Vitamin A: 200-300 µg.

1.Vitamin C : 20-30mg.
2.Calcium : 100-150mg.
3.Iron : 5-7mg.
4.Fiber : 10-15g.

Pest and Disease Management:

1. Aphids : Neemoil, insecticidal soap.
2.Spider mites: Yellow sticky traps, neem oil.
3. Fungal infections: Crop rotation, fungicides (organic).

HUD System Requirements :

1. Temperature : 18-22°C(c4-72°F).
2. Humidity : 50-c0%.
3. Lighting : 12-14 hours supplemental LED.
4. Nutrients : Balanced NPK (10:10:10) with micro nutrients.
5. Soil less mix : Coconut coir or peat moss-based.

SORREL(GONGURA):

Benefits:

- Increased yield : 25-40% higher yield compared to traditional gardening.
- Improved leaf quality: Larger, more tender leaves.
- Extended harvest season: Continuous production in HUD.

HUD Yield:

1. Leaf production : 150-200 grams per plant per harvest (every 20-25 days
2. Harvest cycles : 6-8 cycles per year.

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-1

EDUCATIONAL IMPACT:

Students involvement and learning outcomes:

Student's will be able to:

- Know the benefits of organic culture.
- To gain knowledge about the crops and their cultivation.
- Understand new crop management practices.
- Gain information about the impact of organic farming and indigenous.
- And also get to know about the practices on environment.
- One can explain the nutrition and application of nutrients to plants.
- And also one can explain how they are beneficialtous.
- These are some of the outcomes we have learned through our organic farming project.

CHALLENGES AND SOLUTIONS:

Issues encountered and how to resolve them:

The most common problem with organic herb is the frequency of pest attacks. **Pesticides**:

Boiled Neem leaves and Bitter leaves are used as a pesticides.

Neem spray:
A liquid solution derived from the leaves of the Neem tree used as a natural pesticide and insecticide.

Benefits of Using Pesticides:

- Pest control (insects,mites).
- Fungal diseases (rust).
- Bacterial diseases (leaf spot, blight).
- Plant growth promoter.
- Soil conditioner.

2. **Vernonia amygdalinadelile**:

Also known as the bitter leaf, which is a versatile plant.

There are various uses such as:

- It is an anti malarial property.
- Leaves used in pest control and repellent properties.
- Natural fertilizer and soil conditioner.

Weather Conditions:

Rainfall for the organic herb activities which has to be included fo

Climatic conditions:

The effects of climate change on crop are:

- Soil quality.
- Water management.
- Pest management.
- Limited space.

Knowledge and skill challenges:

Lack of experience.

Limited understanding of herb requirements.

FUTURE RECOMMENDATIONS:

There are some of the future plans to be maintained, such as follows:

- The plant will be protected if the natural pesticide isused.
- Watering the plants on a daily basis aids in their safety.
- Our ecosystem's base is made up of plants. To keep plants from dying. We must protect the plant by providing adequate food and protection from the sun as well as some animals such as goats and cows.
- The soil fertility is improved by adding mulch, which provides some nutrients to the plants.
- Encourage plants to live in natural habitats. With rapid urbanisation, plants Have lost their homes and are forced to survive on barren land.
- As far as possible, promote afforestation.
- Plant as many trees and plants as you can in your neighbourhood.
- Water it thoroughly.
- Protect them from insects and pests.
- Use fences and nets to prevent animals to enter into the field.
- Don't let the plant to go dry.
- The plant will be protected if the natural pesticide isused.
- Watering the plants on a daily basis aids in their safety.
- Our ecosystem's base is made up of plants. To keep plants from dying. We must protect the plant by providing adequate food and protection from the sun as well as some animals such as goats and cows.
- The soil fertility is improved by adding mulch, which provides some nutrients to the plants.
- Encourage plants to live in natural habitats. With rap
  homes and are forced to survive on barren land.
- As far as possible, promote afforestation.
- Plant as many trees and plants as you can in your
- Shelter and warmth are given.
- Natural pesticides can be used.
- Everyday, add some water to the mulch.

CONCLUSION:

Growing Sorre land Amaranthusin an organic HUD system can significantly improve yield, quality, and profitability. By optimizing growing conditions and monitoring potential challenges, gardeners can enjoy abountiful harvest. Organic matter not only releases nutrients into the soil but it also provides water holding capacity, improved permeability and prevents erosion. We have gained many more knowledge from this project.

VISUALDOCUMENTATION:

Photos and videos of the organic herbs at different stages:

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-11

Principal
St.Ann's College for Women
Malkapuram, Visakhapatnam-11