"Sarva Shreshtha Dan Vidya Dan"
Samaj Shikshan Mandal
AMRUTESHWAR ARTS, COMMERCE & SCIENCE COLLEGE,
At Post Vinzar, Tal. Velha, Dist. Pune. Pin No. 412213 Telefax : 02130 - 232323
[ID No. PU/PN/AC 121/(1997)]
NAAC Reaccredited - B
Principal
Dr. Sanjeev Late
M.A., M.Phil., GDC&A., Ph.D.
Email : amruteshwar13@gmail.com
Website : amruteshwar.com

Ref. : A.A.C.S.C./ /20

Date : / / 20

CRITERIA-III	
KEY INDICATOR	**3.3 Research Publication and Awards**
MATRIC NUMBER	**3.3.2**

Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

3.3.2.1. Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during last five years

Item	Year				
	2017-18	2018-19	2019-20	2020-21	2021-22
Number of books and chapters published in conference proceedings	00	03	02	06	07
Total Number of books and chapters published in conference proceedings	18				
Average number of teachers	19				
Number of research paper per teacher	0.947				

I.Q.A.C.
Amruteshwar Arts, Commerce & Science College, Vinzar, Tal. Velha, Dist. Pune.

I.Q.A.C.

Principal

Principal
Amruteshwar Arts, Commerce & Science College, Vinzar, Tal. Velha, Dist. Pune.

"Sarva Shreshtha Dan Vidya Dan"
Samaj Shikshan Mandal
AMRUTESHWAR ARTS, COMMERCE & SCIENCE COLLEGE,
At Post Vinzar, Tal. Velha, Dist. Pune. Pin No. 412213
ID No. PU/PN/AC 121/(1997) AISHE No.: C-41472
NAAC Reaccredited - B
Website : amruteshwar.org Email : amruteshwar13@gmail.com
Principal
Dr. Sanjeev Late
M.A., M.Phil., GDC&A., Ph.D.
Mob.: 9421057654

Ref. : A.A.C.S.C./ /20 Date : / / 20

Internal Quality Assurance Cell

CRITERIA-III	
KEY INDICATOR	3.3 Research Publication and Awards
MATRIC NUMBER	3.3.2

Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during last five years

COVER AND TITLE PAGES OF BOOKS AND PROCEEDINGS PUBLISHED DURING LAST FIVE YEARS

Amruteshwar Arts, Commerce & Science College Vinzar ★ I.Q.A.C.

Nanotechnology in the Life Sciences

Hemen Sarma · Sonam Gupta · Mahesh Narayan · Ram Prasad · Anand Krishnan *Editors*

Engineered Nanomaterials for Innovative Therapies and Biomedicine

Springer

Editors
Hemen Sarma
Department of Botany
Bodoland University, Rangalikhata,
Debergaon
Kokrajhar (BTR), Assam, India

Mahesh Narayan
Department of Chemistry and Biochemistry
University of Texas at El Paso
El Paso, TX, USA

Anand Krishnan
Department of Chemical Pathology
School of Pathology
Faculty of Health Sciences and National
Health Laboratory Service
University of the Free State
Bloemfontein, Free State, South Africa

Sonam Gupta
Associate Scientific Writing
Indegene
Bengaluru, Karnataka, India

Ram Prasad
Department of Botany
Mahatma Gandhi Central University
Motihari, Bihar, India

ISSN 2523-8027 ISSN 2523-8035 (electronic)
Nanotechnology in the Life Sciences
ISBN 978-3-030-82917-9 ISBN 978-3-030-82918-6 (eBook)
https://doi.org/10.1007/978-3-030-82918-6

This Springer imprint is published by the registered company Springer Nature Switzerland AG
The registered company address is: Gewerbestrasse 11, 6330 Cham, Switzerland

Chapter 17
Mycosynthesis of Nanoparticles and Their Potential Application in Pharmaceutical Bioprocessing

Deepak Shelke, Mahadev Chambhare, and Hiralal Sonawane

Contents

D. Shelke · M. Chambhare
Department of Botany, Amruteshwar Arts, Commerce and Science College, Pune, India

H. Sonawane (✉)
PG Research Centre in Botany, Prof. Ramkrishna More Arts, Commerce and Science College, Pune, India

H. Sarma et al. (eds.), *Engineered Nanomaterials for Innovative Therapies and Biomedicine*, Nanotechnology in the Life Sciences,
https://doi.org/10.1007/978-3-030-82518-6_17

Improvement of seed germination of rare and threaten species of Ceropegia and its restoration through developed tubers

[1]Ramesh Kashetti[1] Deepak Bhaskar Shelke[1] Ghalme R. L[2]
[1]Dept of Botany, Anandibai Raorane Art's, commerce and science college, Vaibhavwadi, Sindhudurg.
[2]Dept of Botany, Amruteshwar Art's, commerce and science college Vinzar, Velha, Pune.
[1]PG & Research laboratory, Botany dept.,Dapoli Urban Bank Senior Science College Dapoli, Dist., Ratnagiri, MS, India.
Corresponding author: rlghalme@gmail.com

Abstract:
The pharmaceutically important Ceropegia lawii Hook and Ceropegia oculata Hook var. oculata species are under threaten category due to several factors. Therefore, it is necessary to optimized efficient protocol for its multification and conservation. In present study attempt were made to optimized protocol for tuberization of the herbaceous, endanger, rare and endemic Ceropegia lawii Hook and Ceropegia oculata Hook var. oculata through in vivo culture by improved seed germination and seedling growth. The seed treated with germinator showed significant improvement in seed germination percentage of Ceropegia lawii Hook 94.7±0.35 and Ceropegia oculata Hook var. oculata 75.7±0.52 compared with seeds without germinator treatments (86.3±0.48 and 66±0.47 respectively). The germinated seedlings of Ceropegia species was successfully transferred in soil where it grows luxuriantly and showed well tuberization. After five months of plant growth the harvested tubers were successfully transferred in their natural habitat for its restoration. This developed protocol can be employed for productive conservation of Ceropegia lawii Hook and Ceropegia oculata Hook var. oculata on large-scale.
Key Words: Ceropegia, Seed germination, Improvement, Tuber, Restoration

Introduction

The genus Ceropegia (Asclepiadaceae) distributed in tropical and subtropical Asia, Africa, Australia, Canary and Pacific islands (Anonymous 1992; Bruyns 2003). It comprising 200 species among which 55 species are in India (Malpure et. al. 2006), from which 28 endemic (Jagtap and Singh 1999). The hot spot western ghat having 38 species reported among them 22 are endemic and most are endangered (Yadav and Mayur 2008; Surveswaran et. al. 2009; BSI 2002). The habit Ceropegia generally tuberiferous erect herb and climber some species having beautiful flower it use as ornamental and cultivated in Europe and United states (Hodgkiss 2004; Reynolds 2006). Ceropegia species are store house of starch, sugars, gum, albuminoid, fats, crude fiber and other valuable phytoconstituents which are routinely used in traditional Indian ayurvedic drugs for the treatment of gastric disorders, diarrhea, dysentery, urinary tract disorders etc. (Kirtikar and Basu 1935). Due to the presence of pyridine alkaloid 'cerpegin' Ceropegia having pharmaceutical importance (Sukumar et al. 1995). The CITES of India, states: Analysis of field records reveals that they (Ceropegia) prefer undisturbed habitat and climate and any sort of disturbance affect the population resulting into quick decline of wild status (CITES 1998). There is a big threat to plant because of anthropogenic such as habit destruction, exploitation and natural factors such as climate change, availability of pollinators, problem in seed settings, and mode of propagation. The endemism and number of threats to plant it push to plant in endanger and critically endanger category.

The Ceropegia lawii Hook and Ceropegia oculata Hook var. oculata are herbaceous tuberous plant. They fall under endanger, rare and endemic category. The plants consist of pharmaceutically important constituents. The Ceropegia oculata Hook var. oculata leaves has long petioled, orbicular or broadly ovate, cordate at base, acute to acuminate at apex, acumen straight, coriaceous and pedicels glabrous. The flowers are pinkish outside with distinct white spots at apical portion of corolla tube, corolla tube distinctly dilated at base (globose). The corona c. 6.5 mm high; outer corona consists of five distinctly bifid subsubulate lobes and corpuscle are longer than broad and obtuse at apex (Punekar et al. 2006). The Ceropegia lawii Hook is a woody herb, 30-60 cm tall, with very large, fresh green leaves, 5-10 cm. The white flowers have the typical lantern-shape, associated with Ceropegias. The flower tube has 5 lobes, curved into a closed bowl shape. The lantern shaped flowers are purple inside. It is now in endangered category because of natives utilized its tubers for consumption (Sri Rama Murthy et al. [illegible]. The rare Ceropegia lawii Hook and Ceropegia oculata Hook var. oculata population is coming under endangered

VOLUME 3

RESEARCH TRENDS IN MULTIDISCIPLINARY SUBJECTS

Sruthi S
Kishor Kumar Dash
Dr. Bipin Chandra Pant
Y Suryanarayana Murthy
Nisha Joseph

RESEARCH TRENDS IN MULTIDISCIPLINARY SUBJECTS: VOLUME-3

Edited by: Sruthi S, Kishor Kumar Dash, Dr. Bipin Chandra Pant, Y Suryanarayana Murthy & Nisha Joseph

■

RED'SHINE PUBLICATION PVT. LTD.

Headquarters (India): 88-90 REDMAC, Navamuvada,
Lunawada, India-389 230
Contact: +91 76988 26988
Registration no. GJ31D0000034

In Association with,
RED'MAC INTERNATIONAL PRESS & MEDIA. INC
India | Sweden | UK

■

■

ISBN: 978-93-91479-01-5 (Paperback)
ISBN: 978-93-91479-14-5 (eBook)
ISBN-10: 9-39-147901-4
DIP: 18.10.9391479014
DOI: 10.25215/9391479014
Price: ₹ 600
October, 2021 (First Edition)

■

■

www.redshine.co.in | info@redshine.in
Printed in India | Title ID: 9391479014

22 | SOURCES OF FUNDING FOR STARTUPS: A BRIEF REVIEW

Dr. Anuja V. Gawade

ABSTRACT

In the present scenario, there is a variety of start-up funding sources available. Financing a start-up has really evolved. In the past, people usually used their own savings or borrowed from family members, but now there are many alternatives to the traditional methods of financing so selecting the correct source to get funding is very difficult task. Start-ups developed a viable business model around an innovative product, service, process or platform. These are newly emerged entrepreneurial venture, fast growing businesses which are usually small and initially financed by handful founders of one or two individuals.

Start-up aims to meet a market need by developing or offering an innovative and extraordinary product, process or service, associated with high-tech projects development and production, distribution of new products, processes or services.

When someone starts a new enterprise or tries to get into entrepreneurship they face many problems like finance, land, permission, environmental clearance, foreign investment proposals, family support etc. For a start – up firm it is important to look for the sources of finance that are easily available. To raise the fund start –up is a difficult task, so the entrepreneur should have to keep all the options open while looking at financing and not be fixed at a specific source

NITYA PUBLICATIONS

New Perspectives on COMMERCE & MANAGEMENT

VOLUME-1

Sruthi. S, Dr.Pragya Singh
Er. Yogendra Kumar

CROWD FUNDING: AN INNOVATIVE SOURCE TO CREATE FUNDS

Dr. Anuja V. Gawade

Asst. Professor Department of Commerce, Amruteshwar Arts, Commerce and Science College Vinzar, Tel. Velhe Dist –Pune

Prof. Preeti Rajguru

Assistant Professor Department of Cost and Works Accounting, Brihan Maharashtra College of Commerce, Pune

ABSTRACT : Today there are various sources to generate funds for a new start-up business. 'Crowd Funding' is one of the new concepts to raise finance for start-up.It is a substitute to financial system where funds are generated online. In 'Crowd Funding' are collected from the masses for clear purpose. With the help of social networking sites, the entire process from campaigning of the idea to collection of funds is performed through internet. The concept of 'Crowd Funding' draws inspiration from micro-finance but is more closely related to 'Crowd Sourcing'. Crowd sourcing is collecting ideas, feedback and solutions from the crowd. Although 'Crowd Funding' is based on the idea of crowd sourcing, it still differs as it mainly concerns with collecting money or investment through individuals, generally by using online social media platform. Crowd funding is an innovative way of supporting various activities like disaster relief, support to artists by fans, political campaigns, Start-up, free software development, inventions, scientific research, and civic projects and so on. In this article, the researcher reviews that 'Crowd Funding' is one of the recent source of start-up financing for the new budding entrepreneurs to raised capital. Though 'Crowd Funding' is in nascent stage and still to be set in the legal framework in India, it is surely going be one of the well-established source to raise funds in coming years.

Key words: Crowd Funding (CF), Equity Crowd Funding, Campaign,Creators and Funders

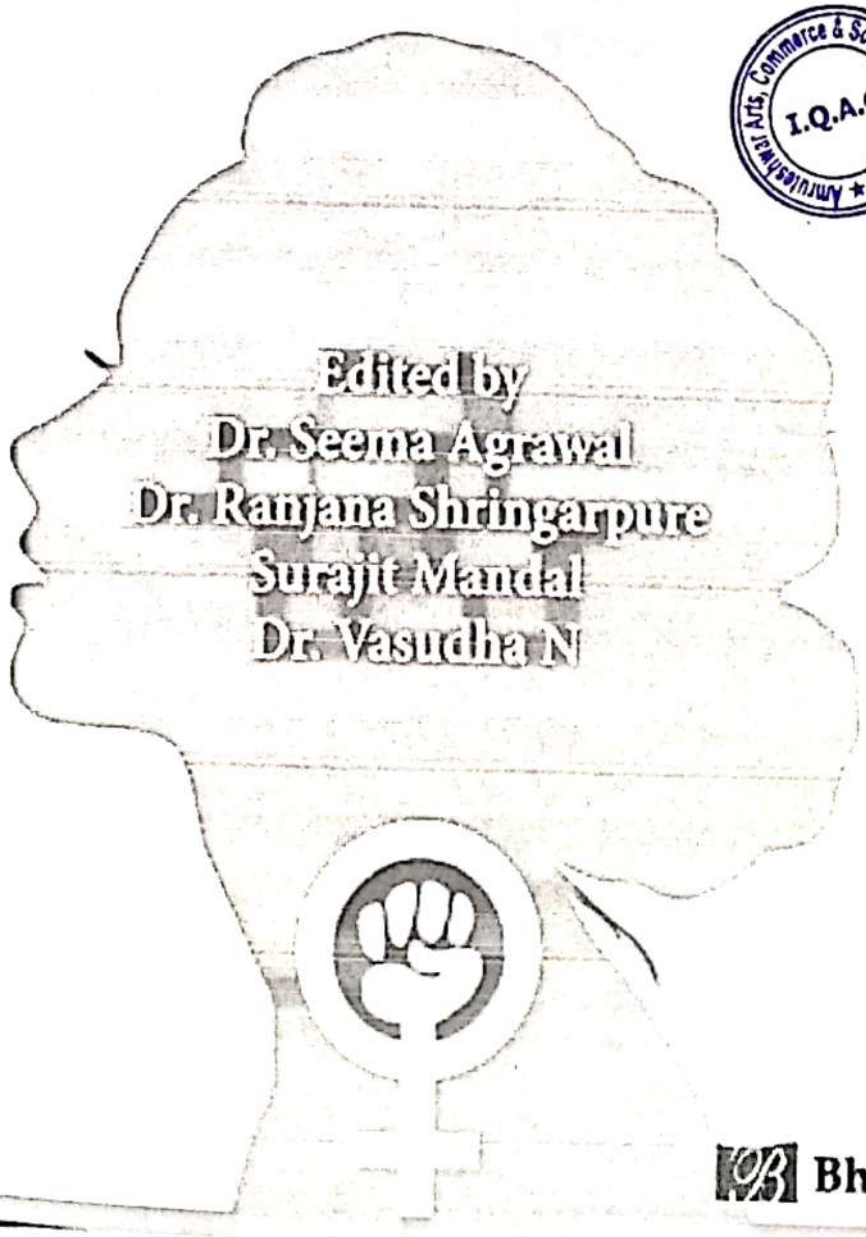
INTRODUCTION

Today the young aspiring youth want to start their own business, but their biggest question is 'how to raise finance?' For this, they keep on looking for different sources of finance. Now-a-days various sources of finance are available for start-ups, and one of the recent trends to raise the start-up fund is 'Crowd Funding'. 'Crowd' means 'People' and 'Funding' means 'raising money'.

Crowd funding is a rapidly growing industry that focuses on providing funds to support some cause or help entrepreneurs and start-up businesses to find capital for their business. It is a financial tool for a start-up for receiving funds without even taking loans or paying EMIs. Crowd funding is the practice of funding a project by raising small amounts of money from various people, through the Internet.

Start-ups have to meet a number of conditions while getting funds from Bootstrapper, Angel Investors, and Capitalists. To overcome all these new start-ups are turning towards 'Crowd funding', which gives them the opportunity to raise capital directly from potential customers or from individuals who make small investments. Crowd funding is defined as a best method of raising capital through the collective efforts of a large number of individual investors. It is done primarily online via social media and websites (Mokter Hossain, 2017)

WOMEN IN INDIAN SOCIETY



Edited by
Dr. Seema Agrawal
Dr. Ranjana Shringarpure
Surajit Mandal
Dr. Vasudha N

Bharti

ISBN: 978-93-91768-62-1

ADVANCES IN MATHEMATICAL AND STATISTICAL SCIENCE

Editors

Dr. Med Ram Verma

Dr. Megha Bhamare

Dr. Sheetal Gomkar

Dr. H. S. Tomar

First Edition: 2022

RECENT ADVANCES IN MATHEMATICS FOR ALLIED SCIENCES

Jyoti Bhate, Manoj Tapare*, Sujit Mane,
Prakash Chikte, Deepak Shelke and Rahul Kamble
Amruteshwar Arts, Commerce and Science College, Vinzar, Pune - 412213
*Corresponding author E-mail: mrtapare1234@gmail.com

Introduction:

Mathematics is fundamental subject and it is backbone of all other branches of the science. Mathematics is an important tool of formulating any real time problem into theoretical model. Many studies are available [1] on impact and necessity mathematics education.

Mathematical model of any problem helps to study, analyze and solve the problem. It sets the standard procedure to handle similar problems in future. Mathematical modeling of the problem helps to compare the problem with previous ones. One can easily study the effect of change in one or more parameters on overall output of the model. Mathematical modeling also facilitates the use of computers and programming to solve the problem. This reduces the error and leads us to the more accurate solution of the problem.

In recent years, mathematical models [2] are seen to be very effective in handling many real time issues like network security, data science, weather forecasting, epidemic analysis etc. On each of these topics, one can get different scientific articles, which explain the models in detail. Apart from it, the students and the researchers studying the pure mathematics are hardly aware of its applications. On the other hand researchers those who are using mathematical models to solve their problem, faces many difficulties due to their less mathematical background. Many high school students feel the subject mathematics difficult [3, 4, 5]. One of the reasons behind this is that the students are unaware of its application and its importance. We feel that the theory taut in the classes and its application to solve real time problem must go hand in hand. Our aim is to introduce the reader with application of mathematics in various subjects like physical sciences, chemical science, life science, social science etc. We also put a light on recent advancements in these topics, which are solved by the mathematical tools.

We strongly feel that this will introduce the reader with real time application of mathematics. This will help in creating interest among students and also reducing unnecessary fear about the mathematics. This article will also help the researcher to find [illegible] real world problems to work on.

Chapter is arranged in five sections. First is the introduction. In section two, we see the application of mathematics in networking. Section three deals with mathematics in plants studies. In fourth section, we discuss mathematics involved in the chemical sciences. Last section deals with the physical phenomenon applying mathematics.

PERSPECTIVES OF MICROFINANCE & WOMEN EMPOWERMENT

DR. AFTAB ANWAR SHAIKH,
DR. M. SHAHID JAMAL ANSARI,
DR. ANA MATEEN

published by

HSRA Publications 2021
#02, Sri Annapoorneshwari Nilaya, 1st Main,
Byraveshwara Nagar, Laggere,
Bangalore – 560058
Ph- 7892793054

Sales Headquarters – Bangalore

ISBN: 978-93-5506-118-8

First Edition 2021

No. of Pages - 184

A STUDY OF HOUSING MICROFINANCE IN INDIA

7

DR. GADKAR PARMESHWAR SAMBHAJI
M. A. (Eco), B. Ed., M. Phil., NET, NET, Ph. D.
Assist. Professor Dept. of Economics & Banking
Amruteshwar Arts, Commerce College
Vinzar, Pune University of P

INTRODUCTION

The 'Real Housing Problem' in India Housing is one of the most primary human needs. Housing problem in India is very acute, particularly among the poor and other marginalized categories, in spite of the appreciable growth in institutional finance to housing in the ongoing reforms era. This is because, majority of the shelter-less population is beyond the reach of the formal institutional system for housing finance.in fact, as per the 11th Five Year Plan (2007-2012) estimates1, as of 2007 viz. the end of the 10th Five Year Plan (2002-07), the total urban housing shortage in India has been 24. 71 million units. Furthermore, of these 24. 71 million units as high as 99. 84 percent belongs to EWS (Economically Weaker Section) and LIG (Low Income Group) categories. The balance 0. 16 percent alone relates to MIG (Middle Income Group) and HIG (High Income Group) put together. That is, 21. 78 million for EWS (88. 14 per cent), 2. 89 million for LIG (11. 70 per cent) and the balance 0. 04 million for MIG and HIG together (0. 16 percent)2. Besides the huge urban housing shortage as above, there is high rural housing shortage of 7 million also. 3 Thus, alternative financing models like microfinance is essential to address 'the real housing problem' in India. 179 European Journal of Economics, Finance and Administrative Sciences - Issue 19 (2010) In India, 'Housing for All' is a national priority. Housing is also a major instrument for economic development of a developing nation like India, because 'research has clearly demonstrated that in most regions housing has the potential of becoming an engine of economic growth because of its high yield on invested resources, a high multiplier effect, and a host of beneficial forward and backward linkages in

P. B. Kavi Kishor
M. V. Rajam
T. Pullaiah *Editors*

Genetically Modified Crops

Current Status, Prospects and Challenges Volume 1

Springer

Editors
P. B. Kavi Kishor
Department of Biotechnology
Vignan's Foundation for Science,
Technology & Research
Guntur, Andhra Pradesh, India

M. V. Rajam
Department of Genetics
University of Delhi, South Campus
New Delhi, India

T. Pullaiah
Department of Botany
Sri Krishnadevaraya University
Anantapur, Andhra Pradesh, India

ISBN 978-981-15-5896-2 ISBN 978-981-15-5897-9 (eBook)
https://doi.org/10.1007/978-981-15-5897-9

This Springer imprint is published by the registered company Springer Nature Singapore Pte Ltd.
The registered company address is: 152 Beach Road, #21-01/04 Gateway East, Singapore 189721, Singapore

Genetic Engineering in Safflower (*Carthamus tinctorius* L.): Retrospect and Prospect

Kirti M. Nitnaware, Vikas B. Naikawadi, Smita S. Chavan, Deepak B. Shelke, Rajkumar B. Barmukh, Archana A. Naik, and Tukaram D. Nikam

Abstract

Safflower (*Carthamus tinctorius* L., Asteraceae) is an important edible oilseed crop. Because of the distinct seed oil profile, high α-tocopherol content, utilization as a leafy vegetable and useful petal pigments, it has special value among oilseed crops and is of much scientific interest. Recently, safflower has been improved for agronomical, nutritional and other traits with the introduction of specific genes from safflower and also other sources. The prerequisite for successful transformation is development of an in vitro propagation protocol, transformation method and gene of interest. Variation exists in regeneration frequency via organogenesis or somatic embryogenesis in different genotypes of safflower. Therefore, standardization of regeneration protocol is necessary for each genotype before gene transformation. Among different explants, cotyledons and api-

K. M. Nitnaware
Department of Botany, Hutatma Rajguru Mahavidyalaya, Pune, Maharashtra, India

V. B. Naikawadi
Post-Graduate Centre, Department of Botany, Chanbasal Tarachand Bora College, Pune, Maharashtra, India

S. S. Chavan
Department of Botany, Mahant Jamanadas Maharaj ACS College, Nashik, Maharashtra, India

D. B. Shelke
Department of Botany, Amruteshwar Arts, Commerce and Science College, Pune, Maharashtra, India

R. B. Barmukh
Post-Graduate Research Centre, Department of Botany, Modern College of Arts, Science and Commerce (Autonomous), Shivajinagar, Pune, Maharashtra, India

A. A. Naik · T. D. Nikam (✉)
Department of Botany, Savitribai Phule Pune University, Pune, Maharashtra, India
e-mail: tdnikam@unipune.ac.in

P. B. Kavi Kishor et al. (eds.), *Genetically Modified Crops*,
https://doi.org/10.1007/978-981-15-5897-9_10

MARCH - APRIL,2020

AMIERJ

AARHAT MULTIDISCIPLINARY INTERNATIONAL EDUCATION RESEARCH JOURNAL

ISSN: 2278-5655

A Peer Reviewed Multidisciplinary Journal
SIF Impact Factor 6.236

Vol IX Special Issues II (Part A)

Editor : Prin. Dr. Nitin Ghorpade

Volume-IX, Issues-II (Part-A) ISSN-2278-5655 March - April 2020

A STUDY OF WELFARE FACILITIES AND ITS EFFECT ON EMPLOYEE SATISFACTION

Prof. Anuja Gawade

Asst. Professor,

Amruteshwar Arts, Commerce and Science College, Vinzar, Tal.Velha Dist. Pune.

Introduction:-

"Employees welfare is comprehensive term including various services benefit and facilities offered to employees and by the employers. Through such generous fringe benefits the employers make life worth living for employees."

Life was hard for the working class at the beginning of the 20 century. In 1900 survey showed that between 15% and 20% of the population were living at subsistence level worse between 8% and 10% of population were living below subsistence level. Among all the resources of production employee is one of the most important functions of production. In it was possible that by hook and crook we can handle our work force, but today situation is totally different. Human being is not just like a machine, they have their emotions, feelings, likes and dislikes also. They do not work only for salary and wages. So satisfaction derived from their job as very important. Job satisfaction is one of the important aspects of HRM. Now days, so many organization are giving welfare facilities to their employees. Because it is related to their satisfaction. If employees giving various welfare facilities their families is satisfied and overall employee satisfaction increasing. Motivated employees may do better.

The basic purpose of employee welfare is to enrich the life of employees and keep them happy and contented. Employee welfare measures motivate the employees for the better performance, it also improves the human relationship and thereby it increases the job satisfaction of the employees. Job satisfaction is a multifaceted concept. It is integral component of organisational climate and it is important element in the management of employee relationship. Therefore the research objective is to study the impact of employee welfare measures on job satisfaction.

Keywords: Employee Welfare, Job satisfaction, Organization

Meaning and Definition:

"Employee welfare is comprehensive term including various services, benefits and facilities offered to employees and by the employers. Welfare including anything that is done for the comfort and improvement of employees and provided over above the wages"

"Job satisfaction means a fulfilment or enjoyment that a person derives from their job". Employee welfare is very close relation to employee satisfaction because welfare helps in keeping the moral and motivation of the employees high so as to retain the employees for longer duration. Welfare include monetary but also many kind forms. Monitoring of working conditions creation of industrial harmony through infrastructure for Industrial relations and insurance against disease, accident and unemployment for the workers and their families.

Review of literatures:-

"According to mark Columbus, in his study welfare facilities toward shoe makers in Chicago' 1964 specifies that welfare measures is one of the most important factors for the overall well-being."satyanarayan and redid (2012) stated that the overall satisfaction levels of employees about welfare measures in the organisation cover is satisfactory ,however a few are not satisfied with welfare measures provided by the organisation therfore it is suggested that the existing welfare measures may be improved further. Such welfare measures enrich the

Vidyawarta

Peer-Reviewed International Research Journal

July To Sept. 2021, Special Issue

Rayat Shikshan Sanstha's

Shripatrao Kadam Mahavidyalaya Shirwal, Tal.Khandala, Dist. Satara

(Dr.PatangraoKadam Educational Complex)

(Shivaji University, Kolhapur)

INTERNAL QUALITY ASSURANCE CELL

AND

DEPARTMENT OF COMMERCE

ORGANISE

A ONE DAY ONLINE

INTERDISCIPLINARY INTERNATIONAL CONFERENCE

ON

The Role of Cyber Security in the Global Context

Saturday, 5th June, 2021

Arts, Commerce & Science College Shirwal, I.Q.A.C.

PRINCIPAL

DR.MANJUSHRI VILASRAO BOBADE

CONVENOR

DR.BALASAHEB KALHAPURE

CO-ORDINATORS

PROF. TULSHIDAS APHALE DR.VILAS SADAPHAL

ORGANIZING COMMITTEE MEMBERS

DR.PRATAP SINHMANE RROF.RAJENDRA TAMBILE PROF. SANTOS HGHANGALE

Harshwardhan Publication Pvt.Ltd.

At Post Umbarganesh Tq Dist Beed

All Types Educational & Reference Book Publisher & Distributors / www.vidyawarta.com

20

STUDY OF WORKING CAPITAL OF VARDHMAN FERTILIZER & SEEDS PRIVATE LIMITED, DISTRICT SOLAPUR, MAHARASHTRA

Asst. Prof. Vijay B. Kadam
Head of Cost & Works Accounting Dept.,
Department of Commerce,
Amruteshwar Arts, Commerce, & Science College, Vinzar, Tal. Velha, Dist. Pune
Savitribai Phule Pune University (SPPU), Pune, Maharashtra

ABSTRACT

Working capital management is concerned with the problems that arise in attempting to manage the current assets, the current liabilities and the interrelationship that exists between them. This paper tries to make an attempt to study the working capital, components of working capital and liquidity of **'Vardhman Fertilizer & Seeds Private Limited, District Solapur'**.

The paper also tries to study the correlation between liquidity and profitability of this fertilize unit. The study is bases on secondary data collected from annual report of this fertilizer unit for the period of 5 years on website of ministry of company affair of India. In this paper, there is an application of correlation analysis for identity the significant of working capital management include the current ratio and quick ratio on the quiddity positon of this fertilizer units.

KEY WORDS: Working Capital, objectives, Hypothesis, sources of data collection, limitation, Net Working Capital, Net Working Capital Ratio, Current Ratio, Liquid Ratio, Findings, Suggestion, Conclusion & References.

INTRODUCTION

Working capital study of **'Vardhman Fertilizer & Seeds Private Limited, District Solapur' (VFSPLDS)** is of major importance of internal & external analysis because of its relationship with the current day to day operations of business. Funds, collected from different sources are invested in the business for the acquisition of assets. These assets are employed for earning revenue. The basic problem facing the finance manager of an enterprise is to trade-off between conflicting but equally important goals of liquidity and profitability and vice versa.

NEED OF STUDY

1. To study the need of maintain sufficient working capital of fertilizer units.

2. To check balance between liquidity and short term.

OBJECTIVES OF THE STUDY

1) To study the position of working capital of selected fertilizer units.

2) To make suggestions for the better working capital management of fertilizer units.

HYPOTHESIS

H0: Insufficient working capital has adverse affected in the liquidity of fertilizer units under study.

H1: Insufficient working capital has not effecting in the liquidity of fertilizer units under study.

PERIOD OF STUDY

The present study is undertaken for the period of five accounting year starting from 2012-2013 to 2016-2017. The researcher has selected 2012-2013 as **base year** for the purpose of analysis and evolution.

SOURCES OF DATA COLLECTION

Researcher has used secondary data as main sources for the presented research study. Annual accounting reports such as income statement position statement are collected form web side of Ministry of Corporate Affairs (MCA) Maharashtra Reginal Division, of Government of India.

LIMITATION OF THE STUDY

To Study the Health Effects of Slum Area in Pune City.

Dr. Sheetal Laxman Shendkar
Director of physical education,
Amruteshwar arts & commerce college, Vinzar,
Affiliation: Savitribai Phule Pune University,
MAHARASHTRA, INDIA
EMAIL: [illegible]

ABSTRACT

Purpose of this study was to examine the Health issues in slum of urban area. The study where uses descriptive survey with help of questioner specially design for this kind of research. S.O.I. Top sheet, Tahsil office Reports, Census Handbook, Paper cutting and PCMC web sites are the secondary data sources for this study. This questionnaire was used to get the information of selected slum area in pune city. The polluted water, insanitation effects on human health of selected slum pockets area population in Pune City. The study would lead to conclusion that awareness of health issues needs to improve in selected slum pockets area in Pune city. NGOs working in the area would suggest to provide sufficient fund to solve health issues in selected slum pockets area in Pune city.

Keywords : Health issues, cartographic techniques, sewage treatment, slum pockets.

INTRODUCTION

This research paper examines effects of poluted water and insanitation on the human health in slum areas. There are many problems in slum of urban area such as, air pollution, land pollution, lack of latrine facilities, lack of medical facilities, lack of educational facilities and so on. The water pipelines which passing and crossing bellow the drainage channels in the slum areas causes the water pollution. This may result to polute the drinking water in pipelines many times the public water taps were closely garbage collection spot. Many diseases are water born diseases. This causes due to poluted or contaminated water. The Polluted water, insanitation and its effect on human health of slum population in areas studied to get some results.

AIMS & OBJECTIVES OF STUDY

To study the effects of slums area on environment of Pune City.

To comparative analysis of diseases in study area.

METHODOLOGY

The study uses descriptive survey with help of questioner specially design for this kind of research. The study focused on the geographical assessment of slum, slum environment and associated problems in of Pune City slum area.

इतिहास : इतिहासाचे सिद्धांत, पद्धती आणि इतिहासाचे दृष्टिकोन

M. A. (History)
First Year
(HIS111)

SAVITRIBAI PHULE PUNE UNIVERSITY

School of Open Learning
(Distance Education Program)

लेखक

प्रा. डॉ. बाळासाहेब मारुती केंदळे
इतिहास विभागप्रमुख, अमृतेश्वर कला, वाणिज्य आणि विज्ञान महाविद्यालय,
विंझर, ता. वेल्हे, जि. पुणे.
Email -kendalethebala@gmail.com

VIKAS® PUBLISHING HOUSE PVT. LTD.
E-28, Sector-8, Noida - 201301 (UP)
Phone: 0120-4078900 • Fax: 0120-4078999
Regd. Office: A-27, 2nd Floor, Mohan Co-operative Industrial Estate, New Delhi 1100 44
• Website: www.vikaspublishing.com • Email: helpline@vikaspublishing.com

IMPACT FACTOR – 3.61

LangLit

An International Peer-Reviewed Open Access Journal

ISSN 2349-5169

Latur (MS) India

AIPROAJ

IMPACT OF COVID-19 ON HIGHER EDUCATION IN INDIA AND POST COVID -19 EDUCATION SYSTEM A BRIEF REVIEW

DR. SEEMA ASHOK BAGUL
Amruteshwar Art's Commerce and
Science College,Vinzar,
Tal.Velhe,Dist.-Pune.

Abstract

If we see the entire space of Higher Education, around 760 universities in India, 38000 + colleges in India, altogether there are almost 4 crore Students studying in higher education system in India. How this situation is going to

Impact on the input side of higher education in India and output side of higher education in India and what will be the situation of post pandemic education system. So the researcher has taken a brief review of this entire situation in her paper.

Key Words- Input, Output, Post pandemic HE system

Input Side of Higher Education in India.

I strongly believe that even after a pandemic situation the enrollment rate will rise by 6% in higher education. Lot of continuing education programs will be unrolled by various top universities. There will be a demand for of skilling and most importantly International admissions are going to increase in Indian Higher education system. What is also going to impact is the choice of the program. People and students have to choose from new baskets of program. The Universities and higher educational institutions would have to offer a wide range of courses or programs and not standard for traditional programs like the B.Com BBA MBA etc. but will have to give certain flavors according to the industry needs and create specializations in their generic programs that is going to change post pandemic. I believe that each University should revise their courses and add new courses according to the need for skills are going to be differ in post pandemic period .It is also going to impact the financial part of Higher Education. The fee collection and the people's capacity to pay the fees on time will change and Universities And Higher Education institutions have to give certain concessions for installments in paying the fees. The Committee of Vice Chancellor has recommended that the entire education admission cycle has delayed up to September this is the impact on the input side of Higher Education.

Output Side of Higher Education

Industries will demand new certain skills sets. We are talking about soft skills and life skills but how a graduating engineer or professional can demonstrate a soft skills now on the online Technology platforms that is going to be make a lot of difference for example industry is going to demand the new skill set and certain soft skills are going to change. Certain sector

IMPACT FACTOR – 3.61 ISSN 2349-5169

Molecular Plant Abiotic Stress

Biology and Biotechnology

Edited by
Aryadeep Roychoudhury
Durgesh Kumar Tripathi

WILEY

13

Chloride (Cl^-) Uptake, Transport, and Regulation in Plant Salt Tolerance

DB Shelke[1,2,#], GC Nikalje[1,3,6,#], TD Nikam[1], P Maheshwari[4], DL Punita[4], KRSS Rao[4], PB Kavi Kishor[5], and P. Suprasanna[6,7]

[1] Department of Botany, Savitribai Phule Pune University, 411 007 Pune, India
[2] Department of Botany, Amruteshwar Arts, Commerce and Science College, Velha, 412213 Pune, India
[3] Department of Botany, R.K. Talreja College of Arts, Science, and Commerce, Ulhasnagar, 421003, Thane, India
[4] Center for Biotechnology, Acharya Nagarjuna University, 522 510 Guntur, India
[5] Department of Genetics, Osmania University, 500 007 Hyderabad, India
[6] Nuclear Agriculture and Biotechnology Division, Bhabha Atomic Research Center, Trombay, 400 085 Mumbai, India
[7] Homi Bhabha National Institute, Mumbai, 400 095, India

13.1 Introduction

Increasing soil salinity in the form of NaCl is one of the most important abiotic stress factors affecting agriculture worldwide. Salt-affected soils are categorized into saline, saline-sodic, and sodic, depending on abundance of salt, types of salt, amount of Na^+ present and soil alkalinity. Na^+ is the common factor in both types and is present along with Cl^-, sulfate, calcium, and magnesium in saline soils and with molybdate and carbonate in sodic soils. Among the world's salt-affected areas, 397 Mha are saline and 434 Mha are sodic (FAO 2008). Excessive irrigation without proper drainage, climate change, rising sea levels, and underlying rocks rich in harmful salts are the factors responsible for elevating salt levels. If these environmental problems continue, there is a possibility of a gradual decrease in the amount of available agricultural land of up to 50% in the future (Wang et al. 2003). Among the various salts, Na^+ and Cl^- are the most dominant in soil, constituting 50–80% of soluble salts from the majority of saline soils (Rengasamy 2010). Hyperosmotic stress, ionic imbalance, and toxicity are important responses after plants are exposed to salinity. Ion homeostasis assumes importance for plant metabolic processes and functioning (Tripathi et al. 2015; Arif et al. 2016). Na^+-related salt tolerance research has been extensively conducted than that of Cl^- in cultivated crops (Teakle and Tyerman 2010). Plants differentially respond to Na^+ and Cl^- ions and possess separate transport systems and associated genetic machinery. It has thus become important to study the individual effects of Cl^- and Na^+ ions on physiological and biochemical aspects of plant growth and development. In rice and soybean, toxicity was more pronounced by Na^+ and Cl^- (Kumar and Khare 2016; Shelke et al. 2019). Sudden increases in the concentrations of Na^+ and Cl^- will

# Equal contribution

Mirza Hasanuzzaman · Kamrun Nahar
Münir Öztürk *Editors*

Ecophysiology, Abiotic Stress Responses and Utilization of Halophytes

Springer

Chapter 10
Halophytes: Prospective Plants for Future

Ganesh Chandrakant Nikalje, Shelke Deepak Bhaskar, Kushi Yadav, and Suprasanna Penna

Contents

Abstract Halophytes are the flowering plants native to saline habitats. These habitats contain high salt, heavy metals and other toxic anthropogenic agents. To complete their life cycle in such harsh conditions, halophytes have developed different strategies like development of succulence, compartmentalization of toxic ions, synthesis of osmolytes, increase in activity of antioxidants and synthesis of compatible solutes. Halophytes have significant applied interests towards various agricultural and non-agricultural purposes besides for maintenance of ecological

G. C. Nikalje (✉)
Department of Botany, R. K. Taleja College of Arts, Science and Commerce, Affiliated to University of Mumbai, Thane, India

S. D. Bhaskar
Department of Botany, Annasaheb Vartak Arts, Commerce and Science College, Virar, MS, India

K. Yadav
Dr. B. Lal Institute of Biotechnology, Rajasthan University, Jaipur, India

S. Penna
Nuclear Agriculture and Biotechnology Division, Bhabha Atomic Research Centre, Mumbai, India

M. Hasanuzzaman et al. (eds.), *Ecophysiology, Abiotic Stress Responses and Utilization of Halophytes*, https://doi.org/10.1007/978-981-13-3762-8_10

RICE SCIENCE

Biotechnological and Molecular Advancements

Deepak Kumar Verma | Prem Prakash Srivastav | Altafhusain B. Nadaf
Editors

AAP APPLE ACADEMIC PRESS
CRC CRC Press
Taylor & Francis Group

CHAPTER 3

SALT STRESS RESPONSES OF GLYCOPHYTIC RICE AND HALOPHYTIC RICE: PHYSIOLOGICAL, BIOCHEMICAL, AND MOLECULAR ASPECTS

DEEPAK SHELKE[1,*], GANESH NIKALJE[2], and PARMESHWAR KUMAR SAHU[3]

[1]*Department of Botany, Annuteshwar Arts, Commerce and Science College, Vinzar, Velha, Pune, Maharashtra 412213, India, Mob.: +00-91-7620110669*

[2]*Department of Botany, Savitribai Phule Pune University, Pune, Maharashtra 411007, India, Mob.: +00-91-9969462817, E-mail: ganeshnikalje7@gmail.com*

[3]*Department of Genetics and Plant Breeding, Indira Gandhi Krishi Vishwavidyalaya, Raipur, Chhattisgarh 492012, India, Mob.: +00-91-8103795885, E-mail: parmeshwarsahu1210@gmail.com*

Corresponding author. E-mail: dpk.shelke1@gmail.com

3.1 INTRODUCTION

Rice is one of the important staple food crops upon which almost half of the world population is subsisting (Verma et al., 2012, 2013, 2015). However, it is most susceptible to salt stress. To improve salt tolerance, basic study of salt tolerance mechanism in rice and other salt-tolerant plants especially halophytes, will be very helpful (Flowers and Colmer, 2008). In this context, halophytic plants have served as candidate plants as they are endowed with specific traits such as salt hair, salt glands, succulence and

ISSN 2249-9598 (Online)
Impact Factor [redacted]
ISRA:JIF

UGC New Delhi Approved Journal No- 46964

Online International Interdisciplinary Research Journal

(An International Multidisciplinary Journal)
Bi-Monthly, Refereed and Indexed Open Access Journal

Editor-In-Chief- Somnath Kisan Khatal
www.oiirj.org
editoroiirj@gmail.com

Influence of Sodium Chloride on Morpho-Physiological Responses of Grass Pea (Lathyrus Sativus L.) During Germination and Early Seedling Growth

Shelke D B[a], Bhusare B P[b], Sonawane H B[c], Nikalje G C[d]

[a]Amruteshwar Art's, Commerce and Science College Vinzar, Velha, Pune-412213, MS, India.

[b]Department of Botany, Savitribai Phule Pune University, Pune-411007, MS, India.

[c]Department of Botany, Prof. Ramkrishna More College, Akurdi, Pune, MS, India.

[d]Department of Botany, R. K. Talreja College Of Arts, Science And Commerce, Ulhasnagar- 421003, MS, India.

Corresponding Author: Dpk.Shelke1@Gmail.Com; Bhushanbhusare@Unipune.Ac.In

Abstract

In the present investigation, morphological and physiological responses of Lathyrus sativus L. to sodium chloride (0, 50, 100 and 200 mM) induced stress was evaluated at seed germination and early seedling stages. The results were recorded in terms of Percent Germination (G%), Root Length (RL), Shoot Length (SL), seedling length, Shoot Fresh Weight (SFW), Shoot Dry Weight (SDW), Percent Tissue Water Content (%TWC), Secondary Roots (SR), Vigour Index (VI), Promptness Index (PI), Germination Stress Tolerance Index percentage (GSI %), Shoot Length Stress Tolerance Index (SLSI), Root Length Stress Tolerance Index (RLSI) and Dry Matter Stress Tolerance Index (DMSI). The increasing concentration of salt significantly diminished physiological parameters at germination level in pea. Its severity was higher in 200 mM NaCl while up to 100 mM NaCl grass pea seedlings maintained their growth by modulating G%, %TWC, VI, PI, GSI (%) and DMSI. The performance of grass pea under influence of salt reveals its moderate salt tolerance ability.

KEYWORDS: Grass pea, Salt stress, Seed Germination, Tolerance

Introduction

Increasing soil salinity is a major constraint to crop growth and yield (Munns 2005; Rengasamy 2006). With this rate, worldwide, by 2050 almost 50 % arable land will be salinized (Wang et al. 2003). In India, about one million ha arable land is suffering from soil salinization and unsuitable for agricultural use (Hossain et al. 2006). Therefore, it is essential to identify salt tolerant crops for sustainable crop yield in salt affected areas.

The legumes belong to third largest family of flowering plants (Meeris et al., 2003; Lewis et al. 2005). Economically, legumes represent the second most important family of crop plants after Poaceae (grass family), accounting for approximately 27% of the world's crop production (Graham and Vance, 2003). Grass pea (Lathyrus sativus L.) commonly known as 'khesari' belonging to the family Fabaceae. Grass pea has been grown for both food and forage in different parts of the world including Australia, the Mediterranean countries, North Africa, South America and

ISSN 2249-9598 (Online)
Impact Factor [redacted]
ISRA:JIF

UGC New Delhi Approved Journal No- 46964

Online International Interdisciplinary Research Journal

(An International Multidisciplinary Journal)
Bi-Monthly, Refereed and Indexed Open Access Journal

Editor-In-Chief- Somnath Kisan Khatal
www.oiirj.org
editoroiirj@gmail.com

PEG mediated green synthesis dihydropyrano[3,2-c]chromene-3-carbonitrile derivatives

Rahul Kamble[a], Manojkumar R. Tapare[b], Akash V. Sarpale[c], Akshay C. Maral[d]

[abcd]Amruteshwar Arts, Commerce and Science College, Vinzar, Pune. 412213

Corresponding Author : Rahul Kamble

Abstract

The present paper reports a green, efficient, and rapid method for the synthesis of 2-amino-5-oxo-4-phenyl-4, 5-dihydropyrano[3,2-c]chromene-3-carbonitrile derivativesby one-pot condensation of 4-hydroxy-2H-chromen-2-one, aldehyde, and malononitrile in the presence of bleaching earth clay in PEG-400. The method has the advantages of operational simplicity, mild reaction conditions, short reaction time, and no environmental impact.

KEYWORDS: Bleaching earth clay, Green chemistry, PEG-400.

INTRODUCTION

Advances in organic synthesis enable chemists to prepare most natural product targets. Even with state of the art methods, however, syntheses often require many synthetic manipulations and purifications, resulting in low overall yields and generation of large amounts of chemical waste. To address these issues, increasing synthetic efficiency and reducing E-factors (defined as the ratio of the mass of waste produced to the mass of product) are becoming more important in designing synthetic routes [1]. One approach to streamline organic synthesis is through tandem and sequential reactions that accomplish multiple steps in a single flask and minimize isolations, purifications, and solvent use. Recently, we have reported several MCRs on the synthesis of Pyrano-[2,3- c]-pyrazoles [2-4].It is well known that pyrans are important core units in a number of natural products [4] and photochromic materials [5]. Compounds with pyran ring system have many pharmacological properties and play important roles in biochemical process [5]. Moreover, 4H-pyrans are useful intermediates for the synthesis of various compounds, such as pyranopyridine derivatives [6], polyazanaphthalenes [7], pyrano[2]pyrimidines [8], and pyridin-2-ones [9]. Therefore, preparation of this heterocyclic nucleus has gained great importance in organic synthesis. There are many sound reports expressing that pyrano[3,2- c]chromene is a class of vital heterocycles with a wide range of biological effects [10] such as spasmolytic, diuretic, anticoagulant, anti-cancer and anti-anaphylactic activity [11]. Moreover fused chromene derivatives have a relatively broad spectrum with high activity profile against various bacteria and fungi [12][13] along with antiproliferative [13], sexpheromonal [14], mutagenicitical [15], antitumor [16], anti-viral [17,18]and central nervous system activities [19]. Recently, several methods have been reported for the synthesis of pyran derivatives via a three-component condensation of b-[illegible] compounds with aldehydes and malononitrile [20].