



Mahatma Gandhi Mission's
COLLEGE OF COMPUTER SCIENCE & IT

(Institute established in 2000 and affiliated to Swami Ramanand Teerth Marathwada University, Nanded)
MGM Campus, Near Airport, Nanded-431605 (Maharashtra) India
(ISO 21001, ISO 14001, ISO 50001 Certified Institute)

Criterion 3
Research, Innovations and Extension

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.

•



MGM's

COLLEGE OF COMPUTER SCIENCE & IT, NANDED

(Institute established in 2000 and Affiliated to S.R.T.M.University Nanded.)

MGM Campus, Near Airport, Nanded-431605(M.S.) India

Data Authentication Declaration

With this declaration, we hereby declare that the information provided in order to obtain NAAC accreditation in this SSR is true to the best of our knowledge. This information is a genuine reflection of our institutional policies and accomplishments and shows our continued dedication to raising the standard of higher education.

Hence certified

Principal

Principal

MGM's College of Computer Sci. & IT

Nanded-431605

MGM's College of Computer Science and IT, Nanded

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 year (2018-19, 2019-20, 2020-21, 2021-22, 2022-23)

Sr. No	Name of the teacher	Title of the book/chapters published	Title of the paper	Title of the proceedings of the conference	Name of the conference	National / International	Year of publication	ISBN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher
1	Ms Shaikh S.H. and B. D. Ghodake	Agri Meet Multidisciplinary e Magazine	Importance of Medicinal Plants for Modern Era			National	2022-23		Aditya CABT Beed MH	Agri Meet Foundation and Hindustan Agricultural research Welfare Society
2	Ms Shaikh S.H.	Innovations in Microbiology and Biotechnology Vol. 4 ,88-98, 2022	Optimization of Modified Media and Comparative Production of Citric Acid by Aspergillus niger	-	-	National	2022-23	ISBN 978-93-5547-416-2 (Print) ISBN 978-93-5547-424-7 (eBook)	COC'SIT Latur MH	B P International https://doi.org/10.9734/bpi/imb/v4/2844E ISBN 978-93-5547-416-2 (Print) DOI: 10.9734/bpi/imb/v4
3	Ms Shaikh S.H.	Agri Meet Multidisciplinary e Magazine	Azolla - A Multipurpose Plant	-	-	National	2022-23		Aditya CABT Beed MH	Agri Meet Foundation and Hindustan Agricultural research Welfare Society
4	Ms. Swati S. Wadadare	-	"Deep learning Convolution Neural Network for Tomato Leaves Disease Detection by Inception" Technical University (BATU), Lonere, India, 12 and 13 Feb 2022.	7th International Conference on Computing in Engineering & Technology (IC CET-2022), Organized by Dr. Babasaheb	7th International Conference on Computing in Engineering & Technology (IC CET-2022), Organized by Dr. Babasaheb Ambedkar	International	2022-23	978-981-19-2719-5	MGM's College of Computer Science & IT, Nanded	
5	Ms. Swati S. Wadadare	-	Computer Vision for Leaf Disease Detection: A Review" organized by School of Computational Sciences, Swami Ramanand Teerth Marathwada University, Nanded (M.S.) March 28-30, 2022	International Conference on Applications of Artificial Intelligence in Industry and Society (AAIIS 2022)	International Conference on Applications of Artificial Intelligence in Industry and Society (AAIIS 2022)	International	2022-23	978-981-19-2719-5	MGM's College of Computer Science & IT, Nanded	
6	Ms. Shinde Anita J.		classification of image for detecting plant disease through computer vision : review		classification of image for detecting plant disease through computer vision : review	National	2022-23		MGM's College of Computer Science & IT, Nanded	
7	Mr. Belnor Rameshwar		Pan- genomic analysis and investigation of important pathovar-specific genes of E. coli isolates		International conference on Advances in Bioactive Molecules (ABM-2022), organised by SLS, SRTM University, Nanded	International	2022-23		MGM's College of Computer Science & IT, Nanded	School of Life Sciences (DST - FIST & UGC - SAP), SRTMU NANDED
8	Dr. Sarsar M. S.		Role of Enzyme in Fruit Juice extraction and clarification		International conference on Advances in Bioactive Molecules (ABM-2022), organised by SLS, SRTM University, Nanded	International	2021-22		MGM's College of Computer Science & IT, Nanded	
9	Dr. Makarand N. Cherekar	Methods in Microbiology of Extremophiles	-	-	-	National	2021-22	ISBN 978-93-91120-01-6	MGM's College of Computer Science & IT, Nanded	AKSHITA PUBLISHERS AND DISTRIBUTORS, Ram Pratap Marg Kartar Nagar, Delhi - 110053
10	Dr. Sarsar M. S.	Methods in Microbiology of Extremophiles	-	-	-	National	2021-22	978-93-91120-01-6	MGM's College of Computer Science & IT, Nanded	AKSHITA PUBLISHERS AND DISTRIBUTORS, Ram Pratap Marg Kartar Nagar, Delhi - 110053



Importance of Medicinal Plants for Modern Era

Shaikh Shabana H.¹, B. D. Ghodake*

¹Assistant professor, MGM's College of CS and IT Nanded(MH)

*Ph.D. Scholar, Dept. of Agril. Botany, Dr. Panjabrao Deshmukh Krishi Vidyapeeth,
Akola- 444 104 (MH)

Correspondence Author: balkrushnaghodake@gmail.com

Abstract

The chemical space now available for drug research includes phytochemicals from medicinal plants. Where we are at with the fundamentals, this traditional knowledge needs to be expanded. Ethnopharmacology and traditional medicine are widely used in India. There have been numerous rituals involving the usage of medicinal plants, such as kadha, kalp, and churna. Medicinal plants have antimicrobial qualities, as we have now demonstrated, and they act against microbes on several levels by diverse means by which we cure humans against diseases. India has a diverse range of flora and native medicinal plants that have been utilized for ages to cure human illnesses in traditional Indian medicine.

Introduction

Since we are known to the monster named SARS-COVID 19 the entire mankind across the globe were suffering from this virus and without any instant remedy to cure we tried many solutions for this virus. Human was always in search of home remedies for mild and serious diseases and the plant Kingdom was the major source. Directly or indirectly plant played a crucial role in finding remedy as we have learned in our holy book and theories from our ancestors now to overcome the virus efforts has been made in the form of plasma T, Vaccination, antiviral treatment, and many more allopathic treatment, India has the privilege of Ayurvedic, Siddha, Unani, and Homeopathy.

Innovations in Microbiology and Biotechnology Vol. 4

HOME ABOUT BOOKS TESTIMONIALS EDITORS CHARGES SUBMISSION CONTACT

Home / Books / Innovations in Microbiology and Biotechnology Vol. 4 / Chapters






Optimization of Modified Media & Comparative Production of Citric Acid by *Aspergillus niger*

Sharad Chandrakant Gangavane ; Vijay Jagdish Upadhye ; Babasaheb Shivmurti Surwase ; Amol Bapurao Khandagale ; Vaishnavi Laxmanrao More ; Shabana Habib Shaikh

Innovations in Microbiology and Biotechnology Vol. 4, 12 March 2022, Page 88-98

<https://doi.org/10.9734/bpi/imb/v4/2844E>

Published: 2022-03-12

View Article  Cite  Share 

Abstract

To investigate high yield citric acid producers other than citrus fruits, *Aspergillus niger* was used for submerged citric acid production. Rice and potato extracts were used as substrates in a comparative study to determine which substrate produced the highest yield. The fluctuations in citric acid production yield were traced using varying concentrations of Sucrose, Glucose, and Nitrogen supplements. The concentration of citric acid produced was determined by titration of citric acid extracted from various media. A comparative study was conducted to determine the optimal requirements for increased citric acid production yield. This study can give a better approach for the large-scale industrial production of citric acid as it is among the highly consumed organic acids, by collection of soil sample from Garden of Dayanand Science College, Latur-Maharashtra and isolation of citric acid producing fungi (*Aspergillus niger*) on PDA medium as pure culture along with cultivation on modified broth medium.

Keywords: Citric acid; submerge fermentation; *Aspergillus niger*; potato; rice

AZOLLA- A MULTIPURPOSE PLANT

Ghodake Balkrushna D.¹, Shaikh Shabana H.² and Jadhav Balaji C.³

¹Research Fellow, Genetics and Tree Improvement division, Tropical Forest Research Institute, Jabalpur (MP)

^{2&3}Assistant Professor, Aditya Agricultural Biotechnology College, Beed (MH)

Introduction


Azolla (water fern, water velvet, floating fern, duckweed fern, fairy moss and mosquito fern) is a genus of seven species of aquatic plant fern belonging to the **Salviniaceae** family; it was previously placed in the **Azollaceae** family. The fern Azolla, hosts a symbiotic blue-green algae *Anabaena azollae*, which is responsible for the fixation and assimilation of atmospheric nitrogen. Azolla, offers the BGA symbiont with a carbon supply and a favorable environment for growth and development. In Azolla, the endo-symbiont, the BGA is even carried through the sexual reproductive phase, perhaps the only one of this kind in the plant kingdom. The BGA is carried during the sexual reproductive phase in Azolla, the endo-symbiont, maybe the only one in the plant kingdom. Azolla is a fascinating plant because of its unique symbiotic association.

Azolla is considered as an invasive plant in freshwater habitats such as wetlands and freshwater lakes, ditches in tropical, subtropical, and warm-temperate regions throughout the world (Fig. 1). It can alter aquatic ecosystem and biodiversity substantially (Weber, 2017).

Taxonomy

- Kingdom : Plantae
- Clade : Tracheophytes
- Division : Polypodiophyta

Deep Learning Convolution Neural Network for Tomato Leaves Disease Detection by Inception

[Swati S. Wadadare](#)  & [H. S. Fadewar](#)

Conference paper | [First Online: 15 May 2022](#)

474 Accesses | 2 Citations

Part of the [Smart Innovation, Systems and Technologies](#) book series (SIST, volume 303)

Abstract

In India, Agriculture is an important sector to improve the economy. It provides over 70% employment overpopulation. So we have to solve their problem through computer-aided systems so that Farmers and Youngsters take an interest in Agriculture and work smartly and without tension. Traditional disease detection was based on feature selection such as color, texture, and shape: these features must be selected for classification, and accuracy was also not high. A Convolution Neural Network (CNN) based method has been proposed here along with Inception V3 for Tomato plant disease detection. It is done by transfer learning technology to retrain tomato disease dataset; an open-source platform is used for the same, which improved accuracy of tomato disease classification without the need of high-end configuration hardware. The accuracy percentage on training is 92.19%, and test accuracy is obtained as 93.03%

Keywords

Convolution Neural Network (CNN)

Deep learning

Image processing

Training set

Test set

InceptionV3

Computer Vision for Leaf Disease Detection: A Review

Swati S. Wadadare¹, Mangesh N. Kothari² and H. S. Fadewar³

^{1,3}School of Computational Sciences, Swami Ramanand Teerth Marathwada University, Nanded 431606, MS India

²Department of Biotechnology, Swami Vivekanand Mahavidhyalaya, Udgir, Dist Latur 413517 MS India

ABSTRACT

Computer vision is one of the leading technologies with wide scope of application. Indian agriculture plays important role in social and financial growth of the nation. Over 70% of Indians directly or indirectly engaged with agricultural based industry. Plant crop diseases are measure threat to this industry causing major loss in production. This review paper is to explore several numbers of researchers working on automated detection of mainly plant leaf disease detection using various techniques from traditional method of image processing, using features like texture, color, shape and Machine Learning (ML) to new holistic approach of Deep learning used for leaf disease detection systems. These are discussed concisely with a review for further studies in sector of Automated Agriculture.

Keywords— ML, Deep learning, ANN, CNN

1 INTRODUCTION

Computer vision is one of recent advances in the field of computer science with wide application. Agriculture sector is prime sector that has wide scope for computer vision Leaf diseases are major threats to plant crops and overall production. India being mainly dependent on agriculture sector for its economy. Early disease detection in the field crop can ease the suitable remedy to get rid of disease and save production loss. Computer vision uses different approaches like machine learning (ML), Artificial intelligence (AI), deep learning (DL) and Convolution Neural Network (CNN). In this paper an attempt is made to take a broad review of contribution of researchers in this sector.

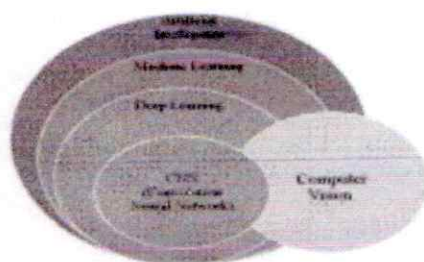


Fig.1 Relationship between Computer vision, Artificial Intelligence, ML, DL and CNN

1.1 Different types of leaf diseases

Leaf is very important part of plant. overall development of plant depends on leaf, if in early stage the leaf disease detection is done then it will be useful for farmer and pathologist to avoid hefty smash up by identifying leaf disease in early stage. Following fig.2 shows different types of diseases.

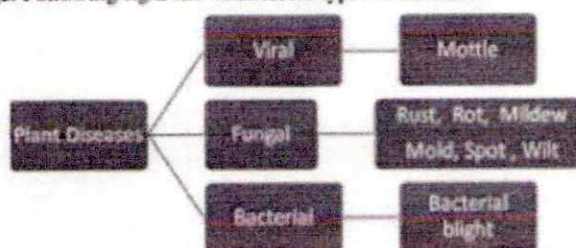


Fig 2.Classification of Leaf Diseases.



CERTIFICATE

— OF PRESENTATION —



INTERNATIONAL CONFERENCE ON RECENT ADVANCES IN ENGINEERING AND COMPUTER APPLICATIONS-2023

14th & 15th July 2023 | Hybrid Conference

Certificate No:

This is to Certify that **Anita J. Shinde** of

..... **Swami Ramanand Teerth Marathwada University Nanded MS** presented his/her worthy

presentation titled **Classification of Image for Detecting Plant Diseases Through Computer Vision: A Review**

.....
during the "International Conference on Recent Advances in Engineering and Computer Applications (ICRAECA 2023)" Organized by LJ School of Computer Applications, LJ University, Ahmedabad, in Association with Institute For Engineering Research and Publication (IFERP) held on 14th & 15th July 2023 in Ahmedabad, India.

Mr. Alok Manke
Director
LJ School of Computer Applications
LJ University

Mr. Siddh Kumar Chhajjar
MD & Founder, IPERP
Technoare Group

Mr. Rudra Bhanu Satpathy
CEO & Founder, IPERP
Technoare Group



ABM-2022

International Conference On
Advances in Bioactive Molecules

Date: April 7-9, 2022



Organized by

SCHOOL OF LIFE SCIENCES

(DST-FIST & UGC-SAP Sponsored)

Swami Ramanand Teerth Marathwada University,
Nanded-431606 (M.S.), India.

This is to certify that **Mr. R.S. Belnor**

of **PhD Scholar, School of Life Sciences, S.R.T.M. University, Nanded, Maharashtra, India.**

has participated in "International Conference on Advances in Bioactive Molecules", organized by the School of Life Sciences, SRTM University, Nanded (MS) India on April 7-9, 2022 and presented a offline-poster on topic entitled, **Pan-genomic analysis and investigation of important pathovar-specific genes of E.coli isolates**

Organizing Secretary

Convener

Role of enzyme in fruit juice extraction and clarification

Abhiruchi S. Deshmukh¹, Madhuri K. Chungade¹, Mayuri S. Sarsar*

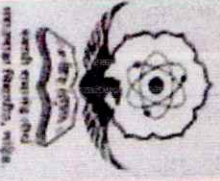
Email ID- abhiruchideshmukh@gmail.com, madhurichungade04@gmail.com,
mayurisarsar3@gmail.com*

Department of Biotechnology and Bioinformatics,
Mahatma Gandhi Mission's, College of Computer Science and IT, Nanded, India

Abstract

The use of enzymes in extraction and clarification of various types of fruit juices has contributed in increasing the yield and production of them in the industry. Enzymatic extraction of juices results in higher yield as compare to mechanical-thermal methods of several fruit pulps. The main purposes of using enzyme increase extraction of juice from raw material, release of various phenolic and other nutritional components in the juice. They also increase processing efficiency and generate a final product that is clear and visually attractive. In present study the fruit juice extraction and clarification was performed by using partially purified thermostable pectinase and protease enzyme produced by *Bacillus licheniformis*.

Key words: extraction, clarification, thermostable pectinase, *Bacillus licheniformis*.

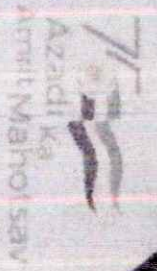


**International Conference On
Advances in Bioactive Molecules**
Date: April 7-9, 2022

Organized by
SCHOOL OF LIFE SCIENCES

(DST-FIST & UGC-SAP Sponsored)

Swami Ramamand Teerth Marathwada University,
Nanded-431606 (M.S.), India.



This is to certify that **Miss Madhuri Kisansinh Chungade**
of **Department of Biotechnology and Bioinformatics, MGM College, Computer Science & IT,**
Nanded, India

has participated in "International Conference on Advances in Bioactive Molecules", organized by the School of Life Sciences, SRTM University, Nanded (MS) India on April 7-9, 2022 and presented a offline-poster on topic entitled,
Role of enzyme in fruit juice extraction and clarification

Organizing Secretary

Danpanna
CONVENER



स्वामी रामानंद तीर्थ मराठवाडा विद्यापीठ, नंदेड
SWAMI RAMANAND TEERTH MARATHWADA UNIVERSITY NANDED
School of Life Sciences



CERTIFICATE OF APPRECIATION

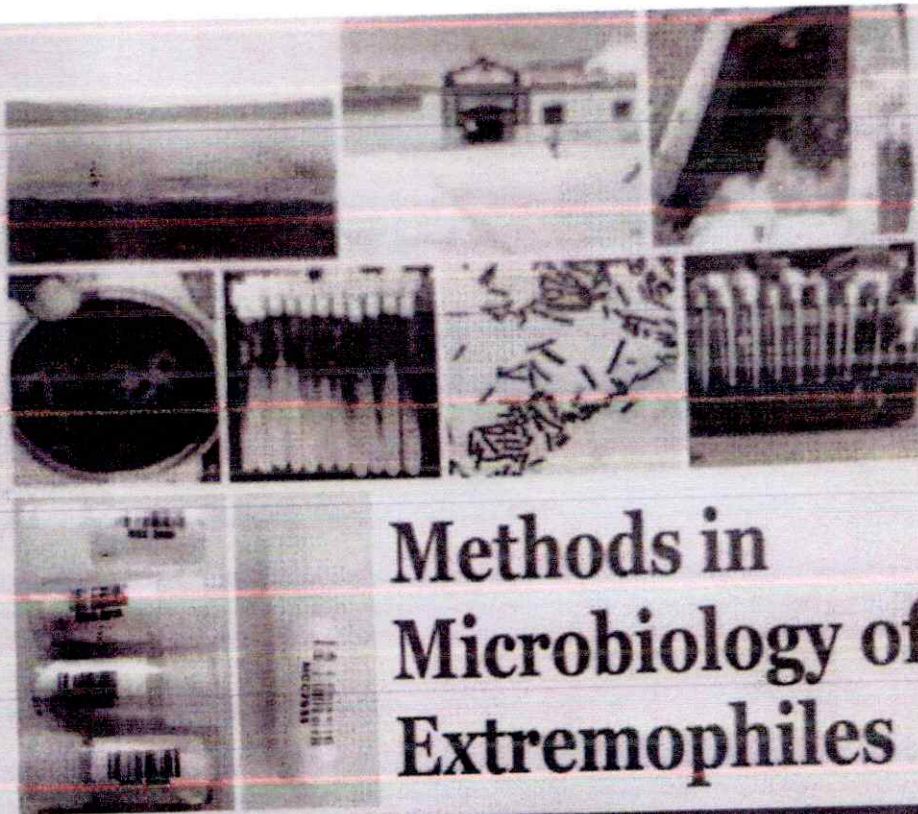
This certificate is awarded to Abhiruchi Deshmukh for
first prize/second prize/third prize achievement in Oral/Poster presentation in
(Online/Offline) mode on the occasion of three days International Conference on
"Advances in Bioactive Molecules (ABM-2022)" - 7th to 9th April, 2022 organized
by the School of Life Sciences, Swami Ramanand Teerth Marathwada University,
Nanded.

DATE : 09-04-2022

PLACE : NANDED



(Signature)
Director
School of Life Sciences,
Swami Ramanand Teerth Marathwada University, Nanded-431606



Methods in Microbiology of Extremophiles

Volume 1

Prof. Dr. (Mrs.) Anupama P. Pathak
Princ. Dr. Mukundraj G. Rathod
Dr. Makarand N. Cherekar
Mrs. Mayuri S. Sarsar

Published by :

Akshita Publishers and Distributors

H.No. J-180/5-A, 4th Pasta,

Palhari Hotel Wali Gali

Opposite Ajay Medical Store,

Kaifiar Nagar, Delhi-110053

E-mail: abooks2019@gmail.com

Mobile: 9968053557,

Methods in Microbiology of Extremophiles (Volume-1)

© Authors

First Edition 2021

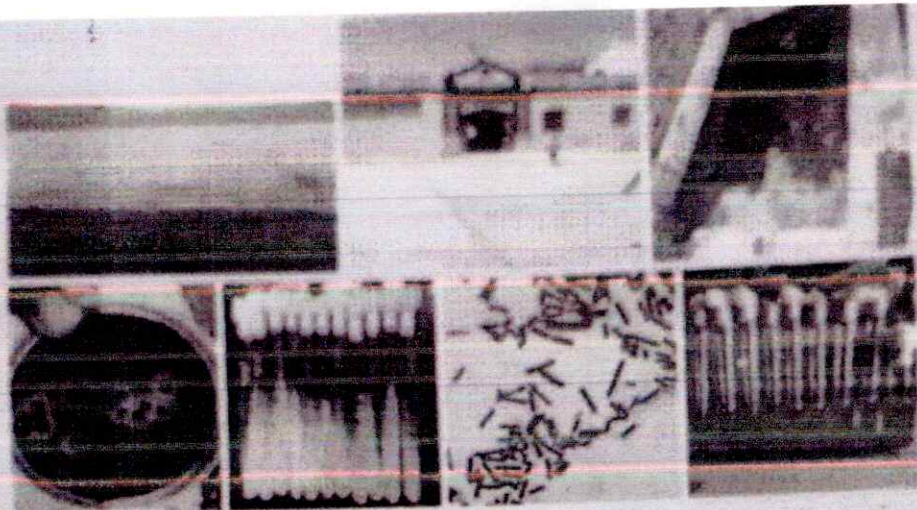
ISBN: 978-93-91120-01-6

All rights reserved no part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Authors

PRINTED IN INDIA

Published by Akshita Publishers and Distributors, Delhi-110053. Laser
Type Setting at Shahabuddin Computers, Printed at Milaan Enterprises,
Delhi-110002.

Dedicated
to
Mother of Universe
Ultimate Source of Energy
Goddess BHAVANI



Methods in Microbiology of Extremophiles

Volume 1

Prof. Dr. (Mrs.) Anupama P. Pathak
Princ. Dr. Mukundraaj G. Rathod
Dr. Makarand N. Cherekar
Mrs. Mayuri S. Sarsar

Published by :

Ashita Publishers and Distributors

H. No. J-180/5, A, 4th Floor,

Palour Hood, Wazirpur,

Opposite Ajaay Medical Store,

Indraprastha Nagar, Delhi-110053

E-mail: ashitabooks2019@gmail.com

Mobile : 9968053357

Methods in Microbiology of Extremophiles (Volume-1)

© Authors

First Edition 2021

ISBN: 978-93-91120-01-6

All rights reserved no part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without the prior written permission of the Authors

PRINTED IN INDIA

Proprietor: Ashita Publishers and Distributors, Delhi-110053. E-mail: ashitabooks2019@gmail.com
Typeset: Ashita Publishers and Distributors, Printed in India. © Ashita Publishers, Delhi-110002

Dedicated
to
Mother of Universe
Ultimate Source of Energy
Goddess BHAVANI