

A
Project Report
On

“Effect of different nutrients on the growth of
yeast Saccharomyces cerevisiae”



Department of Microbiology
Janta Vedic College, Baraut

Supervisor -
Dr. Reena Panwar
Asstt. Professor
J.V. College, Baraut

Submitted by -
Name - Alka Ahmad
Roll No - 210867254001
Enroll. No. - M18278064



Chaudhary Charan Singh University, Meerut
2023

Dr. Reena Panwar
M.Sc. (Micro) Ph.D.



01234-282130 (O)
Assistant Professor
Deptt of Microbiology
Janta Vedic College
Baraut – 250611
Distt. – Baghpat (U.P.)
India

Dated: 02/09/23

CERTIFICATE

This is to certify that entitled “**Effect of different nutrients on the growth of yeast Saccharomyces Cerevisiae.**” submitted in the fulfillment for the award of the degree of **M.Sc. Microbiology** in Department of Microbiology, J.V. College, Baraut – 250611 (U.P.) is an original record of bonafide research work carried out by **Ms. ALKA AHMAD** under my supervision and no part of this thesis has been submitted for any other degree or diploma to any other institute of University. **Ms. Alka Ahmad** worked here from January to June 2023

I wish her all the success in future endeavors.

Date: 02/09/23

Place: J.V.C. Baraut


02/09/23
(Dr. Reena Panwar)

Supervisor

A
Project Report
On

ANTIMICROBIAL PROPERTIES OF SPICES



Department of Microbiology
Janta Vedic College, Baraut

Supervisor
Mr Mahesh Kumar

Submitted By:
Anshika
Roll No. : 210867254002
Enrl. No. : 18280748



CHAUDHARY CHARAN SINGH UNIVERSITY,
MEERUT
2023

CERTIFICATE

This is to certify that thesis entitled "Antimicrobial Properties of Species" used in industrial submitted in the fulfillment for the award of the degree of M.Sc. Microbiology in Department of Microbiology, Janta Vedic College, Baraut-250617 (U.P.) in an original bonafide record of bonafide research work carried out by Anshika under my supervision and no part of the thesis has been submitted for any other degree or diploma to any other Institute or University.

I wish here all success in future endeavour.

Date

Place : Baraut


Mahesh Kumar



TO WHOM SO EVER IT MAY CONCERN

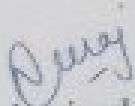
This is certifying that **Anshika** D/o Rahul Kumar student of Janta Vedic College Baraut had undergone 151 days industrial training on "Anti Microbial Properties of Species" at Dabur Pvt. Ltd. Sahibabad, Uttar Pradesh starting from 1 Jan. to 1 June 2023.

The student was allotted a project which was successfully completed. The performance shown in the project and in general was good. Her personal conduct during the training period was found exemplary.

The overall performance during the whole training period can be treated as good.

We wish her success in all her future endeavor.

For Dabur Pvt. Ltd.


Authorised Signatory

A

Project Report

On

“Different Substrates for the Mass Production of
Conidial Yield of *Trichoderma viride*”



Department of Microbiology

Janta Vedic College, Baraut

Supervisor -

Internal – Dr. Mahesh Kumar

Submitted by

Name – Deepanshi Panchal

Roll No. – 210867254003

Enroll No. - M18278089



Chaudhary Charan Singh University, Meerut 2023

Dr. Mahesh Kumar

M.Sc., M.Phil., Ph.D.



☎ 01234-262130(O)

Associate Professor
Deptt. of Microbiology
Janta Vedic College
Baraut- 250 611
Distt.-Baghpat (U.P.) India

Dated

CERTIFICATE

This is to certify that thesis entitled "**Different Substrates for the Mass Production of Conidial Yield of *Trichoderma viride***" submitted in the fulfillment for the award of the degree of **M.Sc. Microbiology** in Department of Microbiology, J.V. College, Baraut-250 611, (U.P.) is an original record of bonafide research work carried out by **Deepanshi Panchal** under my supervision and no part of this thesis has been submitted for any other degree or diploma to any other institute or university. **Deepanshi Panchal** worked here from 01st February, 2023 to 19th August, 2023.

I wish her all the success in future endeavors.

Date :

Place : Baraut

M. Kumar
Dr. Mahesh Kumar
(Internal Supervisor)

A
Project Report
On

"To Standardize growth patterns of S. cerevisiae palats ph and Temperature"



Department of Microbiology
Janta Vedic College, Baraut

Supervisor -
Dr. Varun Tomar
Asstt. Professor
J.V. College, Baraut

Submitted by -
Name - **Garima Khokhar**
Roll No - **210867254004**
Enroll. No. - **M21044255**



Chaudhary Charan Singh University, Meerut
2023

CAMERA

Dr. Varun Tomar
M.Sc. (Micro) Ph.D.



01234-282130 (O)
Assistant Professor
Dept of Microbiology
Janta Vedic College
Baraut - 250611
Distt. - Baghpat (U.P.)
India


Dated: 1/9/23

CERTIFICATE

This is to certify that entitled "To Standardize growth patterns of *S. cerevisiae* palats ph and Temperature" submitted in the fulfillment for the award of the degree of M.Sc. Microbiology in Department of Microbiology, J.V. College, Baraut - 250611 (U.P.) is an original record of bonafide research work carried out by Ms. GARIMA KHOKHAR under my supervision and no part of this thesis has been submitted for any other degree or diploma to any other institute of University. Ms. GARIMA KHOKHAR worked here from January to June 2023

I wish her all the success in future endeavors.

Date: 1/9/23
Place: Baraut


(Dr. Varun Tomar)
Supervisor

NIX HOT 8 | 13MP
RIPPLE CAMERA

Project Report

on

Genotypic characterization of turmeric germplasm using ISSR marker and cloning of its variable DNA fragment



Supervisor: -

Internal: Dr. Reena Panwar
External: Dr. Amolkumar U. Solanke
(Senior Scientist, ICAR-NIPB)

Submitted By:-

Name- Anshika Tomar
Roll No.-210867254005
Enroll. No.-M18278076



Chaudhary Charan Singh University
Meerut



ICAR- National Institute for Plant
Biotechnology
New Delhi

01234-262130(O)

Dr. Reena Panwar

M.Sc., Ph.D.



Assistant Professor
Deptt. Of Microbiology, Janta
Vedic College Baraut-250611
Distt.-Baghpat, U.P. India

Date. 02/09/23

CERTIFICATE

This is to certify that thesis entitled "Genotypic Characterization of turmeric germplasm using ISSR marker and cloning of its variable DNA Fragment" submitted in the fulfillment for the award of the degree of M.Sc. Microbiology in Department of Microbiology, J. V. College, Baraut - 250611, (U.P.) is an original record of bonafide research work carried out by Anshika Tomar under my supervision and no part of this thesis has been submitted for any other degree or diploma to any other institute or university. Anshika Tomar worked here from 01st January, 2023 to 30th June, 2023.

I wish her all the success in future endeavors.

Date 02/09/23
Place: Baraut J.V. College


Dr. Reena Panwar
(Internal Supervisor)



भाकृअनुप - राष्ट्रीय पादप जैवप्रौद्योगिकी संस्थान
ICAR-National Institute for Plant Biotechnology

कृषि एवं किसान कल्याण मंत्रालय (भारत सरकार)
Ministry of Agriculture & Farmers Welfare (Govt. of India)
ला. ब. शास्त्री भवन, पूसा परिसर, नई दिल्ली - 110012 (भारत)
LBS Building, Pusa Campus, New Delhi- 110012 (INDIA)



Dr Amolkumar U. Solanke
Senior Scientist

July 15, 2023

CERTIFICATE

This is to certify that Anshika Tomar, M.Sc. Microbiology has successfully completed her six months dissertation under my guidance on the research project "Genotypic characterization of Turmeric germplasm using ISSR marker and cloning of its variable DNA fragment" at ICAR- National Institute of Plant Biotechnology, New Delhi, from 1st January 2023 to 30th June 2023 (for six months) for the fulfilment of the post-graduation degree i.e. Masters of Science specialization in Microbiology submitted to the Janta Vedic college, Baraut Distt. Baghpat (CCS University, Meerut).

Ms. Anshika is a keen learner and a hard-working student. I wish good luck for her future endeavors.

Dr Amolkumar U. Solanke

A Project Report
On
**ISOLATION OF HEAT RESPONSIVE GENE FROM WHEAT
VARIETY C-306**

Submitted to



ICAR
Indian Council of Agricultural
Research

Department of Microbiology
Janta Vedic College, Baraut

ICAR- NIBP LBS Building
Pusa campus New Delhi-110012

Supervisor:-

Internal:- Dr. REENA PANWAR

External:- Dr. JASDEEP CHATRATH PADARIA
(PRINCIPAL SCIENTIST, NIPB)

Submitted By:-

SHABANA KHATOON

ROLL NO:- 210867254006

ENROLL NO:- M18278122



CHOUHDARY CHARAN SINGH UNIVERSITY MEERUT

2023

Dr. Reena Panwar

M.Sc.(Microbiology), Ph.D



01234-282130 (O)

Assistant Professor

Department of Microbiology

Janta Vedic College

Baraut-250611

Distt. Baghpat (U.P.) India

DATED:-

CERTIFICATE

This is to certify that entitled “ ISOLATION OF HEAT STRESS GENE FROM WHEAT VARIETY C-306” submitted in the fulfillment for the award of the degree of M.Sc. Microbiology in the Department of Microbiology, J.V. College, Baraut-250611 (U.P.) is an original record of bonafide research work carried out by Shabana Khatoon under my supervision and no part of this thesis has been submitted for any other degree and diploma to any other institute or university. Shabana Khatoon worked here from 1 October 2022 to 31 March 2023.

I wish her all the success in future endeavors.

DATED :- 02/09/23

PLACE:- J.V.C. Baraut

Dr. Reena Panwar

(Internal supervisor)



ICAR- National Institute for Plant Biotechnology
Lal Bahadur Shastri Building, PUSA Campus, New Delhi-110012

Dr. Jasdeep Chatrath Padaria
Principal Scientist

CERTIFICATE

This is to certify that the dissertation work, entitled '**Isolation of Heat Stress Responsive Gene *Asr3* from Indian bread wheat (*Triticum aestivum* L.) genotype C-306'** submitted by **Ms Shabana Khatoon** (Roll No:- 210867254006 Enroll No:- M18278122), student of Department of Microbiology Janta Vedic College, Baraut, Baghpat, CHAUDHARY CHARAN SINGH UNIVERSITY MEEUT in partial fulfillment of requirement for conferring a MSc degree is a record of her research work carried out by her under my guidance at ICAR-NATIONAL INSTITUTE FOR PLANT BIOTECHNOLOGY from October 1, 2022 to March 31, 2023.

Signature of External Supervisor

Date: 10.8.2023

Phone: 091-11-25841787 X 270, E-mail: jasdeep_kaur64@yahoo.co.in, jasdeepadaria14@gmail.com

A
PROJECT REPORT

ON
"Comparative analysis of antimicrobial activity of leaf extracts of Mango
(*Mangifera indica*), Lemon (*Citrus limon*), Tulsi (*Ocimum tenuiflorum*),
Harsingar (*Nyctanthes arbor-tristis*), Bael (*Aegle marmelos*) against oral
microflora isolated from oral cavity of 20-25 yrs youngs from Meerut
district"



Supervisor-

Internal – Dr. Varun Tomar

External – Dr. Sonia Sharma

Submitted By-

Name- Priti

Roll no- 210867254007

Enroll. no- M18278567



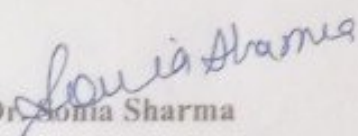
Chaudhary Charan Singh University, Meerut 2023

Date:

CERTIFICATE

This is to certify that the project report entitled "Comparative analysis of antimicrobial activity of leaf extracts of Mango (*Mangifera indica*), Lemon (*Citrus limon*), Bael (*Aegle maemelos*), Tulsi (*Ocimum tenuiflorum*), Harsingar (*Nyctanthes arbor-tristis*) against microflora isolated from oral cavity of 20-25 years old young students of Meerut district" submitted for the partial fulfillment of the requirements for the degree of Master of Science in Microbiology is a record of original bonafide research work carried out by **Priti Kumari** under the supervision of **Dr. Sonia Sharma** at department of Microbiology, C.C.S. University, M.I.E.T., Meerut.

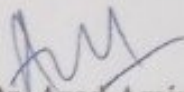
It is further certified that the work has not been submitted elsewhere previously for the award of any degree or diploma.


Dr. Sonia Sharma

Assistant Professor

Department of Biotechnology and Microbiology

M.I.E.T., Meerut


Dr. Asad Amir

Head of Department

Department of Biotechnology and Microbiology

M.I.E.T., Meerut

Dr. Varun Tomar
M.Sc, M.Phill. Ph.D.



01234-202130 (O)

Assistant Professor
Dept. of Microbiology
Janta Vedic College
Baraut - 250 611
Distt. Baghpat, U.P. India

Dated 11/9/23

CERTIFICATE

This is to certify that thesis entitled " Comparative analysis of Antimicrobial activity of leaf extracts of Mango (*Mangifera indica*), Lemon (*Cirus limon*), Bael (*Aegle marmelos*), Tulsi (*Ocimum tenuiflorum*), Harsingar (*Nyctanths arbor-tristis*) against microflora isolated from oral cavity of 20-25 years old young students of Meerut district" submitted in the fulfillment for the award of the degree of M.Sc. Microbiology in Department of Microbiology, J. V. College, Baraut - 250 611, (U.P.) is an original record of bonafide research work carried out by Km Priti under my supervision and no part of this thesis has been submitted for any other degree or diploma to any other institute or university. Km Priti worked here from 01" Feb, 2023 to 31th July, 2023.

I wish her all the success in future endeavors.

Date:.....11/9/23

Place: Baraut

Dr. Varun Tomar

(Internal Supervisor)

Bhargh
21/9/23
Ex+K Examined

A
Project Report
On

“Biochemical and Molecular Characterization of
Mesorhizobium ciceri”



Department of Microbiology
Janta Vedic College, Baraut

Internal:

Dr. Reena Panwar

External:

Dr. Kanika Kumar

Principal Scientist of NIPB,

Pusa Campus New Delhi

Submitted by -

Name – Rashmi Tomar

Roll No - 2108672540

Enroll. No. – M17140274



Chaudhary Charan Singh University, Meerut
2023

Dr. Reena Panwar
M.Sc. (Micro) Ph.D.



01234-282130 (O)
Assistant Professor
Deptt of Microbiology
Janta Vedic College
Baraut - 250611
Distt. - Baghpat (U.P.)
India

Dated: 02/09/23

CERTIFICATE

This is to certify that entitled "Biochemical and Molecular Characterization of Mesorhizobium Ciceri" submitted in the fulfillment for the award of the degree of M.Sc. Microbiology in Department of Microbiology, J.V. College, Baraut - 250611 (U.P.) is an original record of bonafide research work carried out by Ms. Rashmi Tomar under my supervision and no part of this thesis has been submitted for any other degree or diploma to any other institute of University. Ms. Rashmi Tomar worked here from January to June 2023

I wish her all the success in future endeavors.


(Dr. Reena Panwar)

Date: 02/09/23

Place: J.V. College, Baraut

Principal Scientist

Certificate

This is to certify that Ms. Rashmi Tomar, student of M. Sc. (Microbiology), Roll No. 210867254008, Janta Vedic College, Baraut, Baghat, Ch. Charan Singh University, Meerut, U.P., has carried out her project entitled " Biochemical and Molecular characterization of *Mesorhizobium ciceri* " from January 2023 to June 2023, under my guidance at National Institute for Plant Biotechnology, I.A.R.I. Campus, New Delhi-110012.

The report embodies the original work of the candidate to the best of my knowledge.

Kanika
Kanika Kumari
Principal Scientist
ICAR-National Institute for Plant Biotechnology
Lal Bahadur Shastri Building, IARI Campus
New Delhi, India -110 012

Project Report

on

Assessment of genetic diversity in Gerbera using ISSR and IRAP markers



Supervisor: -

Internal: Dr. Reena Panwar

External: Dr. Amolkumar U. Solanke

(Senior Scientist, ICAR-NIPB)

Submitted By:-

Name: Shivani Dangi

Roll No: 210867254009

Enroll. No: M18278223



Chaudhary Charan Singh University

Meerut

(2023)



ICAR- National Institute
for Plant Biotechnology

New Delhi

Dr. Reena Panwar

M.Sc. (Microbiology), Ph.D.



Assistant Professor

Deptt. of Microbiology

Janta Vedic College

Baraut- 250611

Dist- Baghpat, U.P. India

Dated: 02/09/23

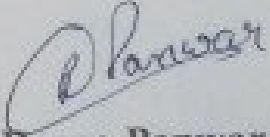
CERTIFICATE

This is to certify that entitled "Assessment of genetic diversity in Gerbera using ISSR and IRAP markers" submitted in the fulfillment for the award of the degree of M.Sc. Microbiology in Department of Microbiology, J.V. College, Baraut – 250 611 (U.P) is an original record of bonafide research work carried out by Shivani Dangi under my supervision and no part of this thesis has been submitted for any other degree and diploma to any other institute or university. Shivani Dangi worked here from 01st January, 2023 to 30th June, 2023.

I wish her all the success in future endeavors.

Dated: 02/09/23

Place: Baraut, J.V. College


Dr. Reena Panwar
(Internal supervisor)



भाषअनुप - राष्ट्रीय पादप जैवप्रौद्योगिकी संस्थान
ICAR-National Institute for Plant Biotechnology
कृषि एवं किसान कल्याण मंत्रालय (भारत सरकार)
Ministry of Agriculture & Farmers Welfare (Govt. of India)
ला. ब. शाखी भवन, पूसा परिसर, नई दिल्ली -110012 (भारत)
LBS Building, Pusa Campus, New Delhi- 110012 (INDIA)



Dr Amolkumar U. Solanke
Senior Scientist

July 10, 2023

CERTIFICATE

I certify that the thesis entitled "**Assessment of genetic diversity in Gerbera using ISSR and IRAP markers**" comprises research work carried out by **Shivani Dangi** under my supervision at **ICAR-National Institute for Plant Biotechnology, New Delhi** during the period between 1st January 2023 to 30th June 2023 for the fulfillment of the degree of **Masters of Science in Microbiology** submitted to the **Janta Vedic College, Baraut Dist. Baghpat (CCS University, Meerut)**.

Ms. Shivani is a keen learner and a hard-working student. I wish good luck for her future endeavors.

Dr Amolkumar U. Solanke
10/7/2023

Dr Amolkumar U. Solanke

A
PROJECT REPORT

ON
"Antimicrobial screening of leaf extracts of Mango(*Mangifera indica*), Neem(*Azadirachta indica*), Tulsi(*Ocimum sanctum*), Jamun (*Syzygium cumini*), Curry Leaves(*Murraya koenigii*) against oral microflora isolated from 35-40 yrs adults from Baghpat district"



Supervisor-

Internal – Dr. Mahesh Kumar

External – Dr. Sonia Sharma

Submitted By-

Name- Simran Tomar

Roll no- 210867254010

Enroll. no- M16109786



Chaudhary Charan Singh University, Meerut 2023

Dr. Mahesh Kumar
M.Sc, M.Phil. Ph.D.



01234-202130 (O)

Assistant Professor
Dept. of Microbiology
Janta Vedic College
Baraut - 250 611
Distt. Baghpat, U.P. India

Dated

CERTIFICATE

This is to certify that thesis entitled " Antimicrobial screening of leaf extracts of Mango (*Mangifera indica*), Neem (*Azadirachta indica*), Tulsi (*Ocimum sanctum*), Jamun (*Syzygium cumini*), Curry leaves (*Murraya koenigii*) against oral flora from 35-40yrs adults from Baghpat" submitted in the fulfillment for the award of the degree of M.Sc. Microbiology in Department of Microbiology, J. V. College, Baraut - 250611, (U.P.) is an original record of bonafide research work carried out by Simran Tomar under my supervision and no part of this thesis has been submitted for any other degree or diploma to any other institute or university. Simran Tomar worked here from 01" Feb, 2023 to 31th July, 2023.

I wish her all the success in future endeavors.

Date:.....

Place: Baraut

Handwritten: 21/9/23
Ext. Examiner

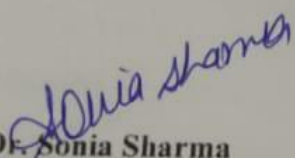
M. Kumar
Dr. Mahesh Kumar 21/9/2023
(Internal Supervisor)

Date:

CERTIFICATE

This is to certify that the project report entitled "Antimicrobial screening of leaf extracts of Mango (*Mangifera indica*), Neem (*Azadirachta indica*), Tulsi (*Ocimum sanctum*), Jamun (*Syzygium cumini*), Curry leaves (*Murraya koenigii*) against oral flora from 35-40yrs adults from Baghpat" submitted for the partial fulfillment of the requirement for the degree of Master of Science in Microbiology is a record of original bonafide research work carried out by **Simran Tomar** under the supervision of **Dr. Sonia Sharma** at department of Microbiology, C.C.S. University, M.I.E.T., Meerut.

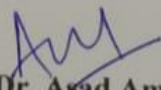
It is further certified that the work has not been submitted elsewhere previously for the award of any degree or diploma.


Dr. Sonia Sharma

Assistant Professor

Department of Biotechnology and Microbiology

M.I.E.T., Meerut


Dr. Asad Amir

Head of Department

Department of Biotechnology and Microbiology

M.I.E.T., Meerut

A

Project Report

On

Typhoid fever- Clinical & Antibiotic sensitivity profile



Department of Microbiology

JANTA VEDIC COLLEGE, BARAUT (BAGHPAT) 250611

Supervisor

Internal - Dr. Mahesh Kumar

External - MK Chaudhary

Submitted by

Name - Tanu

Roll No. - 210867254011

Enroll. No. - M17140377



CHAUDHARY CHARAN SINGH UNIVERSITY, MEERUT

2021-2023

Dr. Mahesh Kumar
M.Sc, M.Phil, Ph.D.



01234-262130(0)

Assistant Professor
Dept. of Microbiology
Janta Vedic College
Baraut – 250611
Distt. Baghpat, U.P. India

Dated:

CERTIFICATE

This is to certify that thesis entitled "TYPHOID FEVER- CLINICAL & ANTIBIOTIC SENSITIVITY PROFILE" submitted in the fulfillment for the award of the degree of M.Sc Microbiology in Department of Microbiology, J.V. College, Baraut - , (U.P.) is an original record of bonafide research work carried out by **Tanu** under my supervision and no part of thesis has been submitted for any other degree or diploma to any other institute or university. **Tanu** worked here from 20 February 2023- 20 August 2023.

I wish her all the success in future endeavors.

Date:

Place: Baraut

M. Kumar
Dr. Mahesh Kumar
(Internal Supervisor)



Date: 07-July-2023

TRAINING CERTIFICATE

This is to certify that Ms. Tanu D/O Mr. Lokender Kumar Sharma student of M.Sc. Microbiology has completed training in the Department of Microbiology, Diagno Lab Pvt. Ltd. "Typhoid Fever - Clinical and Antibiotic Sensitivity Profile" for a period of 3 months from 5th April 2023 to 5th July 2023 under our HOD guidance. Her performance has been satisfactory and submitted the project so as to fulfill all the requirement successful completion of the training.

She is a reliable sincerer, hardworking and cooperative person and bears a good moral character. We wish her all success for his bright future.



‘To investigate the expression of POTEE in immune cells and cell lines in epithelial ovarian cancer’

“Dissertation Submitted in partial Fulfilment of the requirement for the Award of Degree of Master of science in Microbiology”

By
Urvashi Sharma
M.Sc. microbiology, Sem. 4th

Enrollment no.- 18293212

Under the supervision of



Supervisor
Dr. Reena Panwar
Assistant professor
Department of microbiology
Janta Vedic college
Baraut : 250611



Co-supervisor
Dr. Ashok Sharma
Additional professor
All India Institute Of Medical Science
New Delhi : 110029



A. Sharma
डॉ. आशोक शर्मा पी.एच.डी. / Dr. Ashok Sharma Ph.D.
अपर-आचार्य/डी.बी.टी.-रामलिंगास्वामी फेलो/डी.एस.टी.-रामचन्द्रन अवबोधी
Additional Professor/DBT-Ramalingaswami Fellow-DST-Ramachandran Avabodhi
जैवरसायन विभाग / Dept. of Biochemistry
अखिल भारतीय आयुर्विज्ञान संस्थान / A.I.I.M.S.
अंसारी नगर, नई दिल्ली-110029, भारत
Ansari Nagar, New Delhi-110029, India

Chaudhary Charan Singh University, Meerut, 2023

0123-262130(0)

Dr. Reena Panwar
M.Sc., Ph.D



Assistant Professor
Deptt. of Microbiology
Janta Vedic College
Baraut - 250611
Distt.-Baghpat, U.P. India

CERTIFICATE

Date.....

This is to certify that thesis entitled '**To investigate the expression of POTEE in immune cells and cell lines in epithelial ovarian cancer**' submitted in the fulfilment for the award of the degree of M.Sc. microbiology in Department of microbiology, J.V. College, Baraut - 250 611, (UP) and Dr. Ashok Sharma (Co-supervisor) at Department of Biochemistry, AIIMS, New Delhi, is an original record of bonafide research work carried out by **Urvashi Sharma** under my supervision and no part of this thesis has been submitted for any other degree or diploma to any other Institute or University.

I wish her all the success in future endeavours.

Supervisor
Dr. Reena Panwar
Assistant Professor
Department of Microbiology
Janta Vedic College
Baraut, 250611

Co-supervisor
Dr. Ashok Sharma
Additional Professor
Department of Biochemistry
All India Institute of
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A
Project Report

On

“Different Substrates for the Mass Production of
Conidial Yield of *Trichoderma harzianum*”



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Supervisor

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CERTIFICATE

This is to certify that thesis entitled "*Different Substrates for the Mass Production of Conidial Yield of Trichoderma harzianum*" submitted in the fulfillment for the award of the degree of M.Sc. Microbiology in Department of Microbiology, J.V. College, Baraut-250 611, (U.P.) is an original record of bonafide research work carried out by Varsha Panchal under my supervision and no part of this thesis has been submitted for any other degree or diploma to any other institute or university. Varsha Panchal worked here from 01st February, 2023 to 19th August, 2023.

I wish her all the success in future endeavors.

Date :

Place : Baraut

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