

A
RESEARCH PROJECT
DEPARTMENT OF CHEMISTRY
J.D.M.V.P.Co-Op SAMAJ's SHRI S.S.PATIL ARTS,
SHRI.BHAUSAHEB T.T.SALUNKHE COMMERCE AND
SHRI.G.R.PANDIT SCIENCE COLLEGE, JALGAON
NAAC ACREDITED "B+" GRADE



Entitled

"Synthesis and Characterization of Conjugated Porous
Polymers and Their Composites Having Potential Applicability
SUBMITTED TO

K.B.C.NORTH MAHARASHTRA UNIVERSITY,
JALGAON

SUBMITTED BY

Ms. Swati Rajendra Wagh *Swathi*

Ms. Sujata Jivan Patil *Sujata*

Ms. Uma Sunil Patil *Uma*

Ms. Deepawali Bhimrao Gokhle *Deepawali*

Ms. Chetna Pralhad Patil *C.patil*

UNDER THE GUIDENCE OF

Dr.Mrs.M.S.Patil

NUTAN MARATHA COLLEGE JALGAON (2022-23)

DEPARTMENT OF CHEMISTRY

J.D.M.V.P.Co-Op SAMAJ'S SHRI S.S.PATIL ARTS,
SHRI.BHAUSAHEB T.T.SALUNKHE COMMERCE AND
SHRI.G.R.PANDIT SCIENCE COLLEGE, JALGAON
NAAC ACREDITED "B+" GRADE



-:CERTIFICATE:-

This is certifying that project on Entitled
**Synthesis and Characterization of Conjugated Porous
Polymers and Their Composites Having Potential
Applicability**

Has been submitted by
In the partial fulfilment and requirement for the award of the
degree of

**MASTER OF SCIENCE (Organic Chemistry) under the
K.B.C. North Maharashtra University, Jalgaon is carried
out under our supervisor and guidance.**

S. Prate
Dr. Mr. M. S. Prate
Project In Charge

M.S. Patil
Dr. Mrs. M. S. Patil
Head of Department of Chemistry

HEAD OF THE
Chemistry Dept.
Shri S. S. Patil Arts and Shri Bhausaheb T. T. Salunkhe
Commerce Coll. and Shri G. R. Pandit
Science College, Jalgaon

13

P.G. DEPARTMENT OF CHEMISTRY
NAAC Accredited 'B+' Grade
J.D.M.V.P.Co-Op SAMAJ's SHRI S.S.PATIL ARTS,
SHRI.BHAUSAHEB T.T.SALUNKHE COMMERCE AND
SHRI.G.R.PANDIT SCIENCE COLLEGE, JALGAON

-:DECLARATION:-

We hereby declare that the MSC Research Project entitled,
Synthesis and Characterization of Conjugated Porous
Polymers and Their Composites Having Potential

Applicability has been complete and written by us under
the supervisor of
Dr.M.S. Patil Present work done not copied from any other
project report submitted to university or examining body.

DATE:

PLACE:

NAME:

Miss. Sujata Jivan Patil
Miss. Uma Sunil Patil
Miss. Swati Rajendra Wagh
Miss. Dipawali Bhimrav Gokhale
Miss. Chetna Pralahad Patil



A handwritten signature in blue ink, consisting of a stylized 'S' followed by a horizontal line.

PRINCIPAL
J.D.M.V.P.S.

Shri S.S.Patil Arts, Shri Bhausaheb
T.T.Salunkhe Commerce and
Shri.G.R.Pandit Science College, Jalgaon

A SHORT RESEARCH PROJECT DEPARTMENT OF CHEMISTRY
J.D.M.V.P'S Co-op SAMAJ'S SHRI.S.S. PATIL ARTS, SHRI. BHAUSAHEB
T.T. SALUNKHE COMMERCE AND SHIR.G.R.PANDIT SCIENCE COLLEGE,

JALGAON-425001

NAAC ACREDITED "B+" GRADE



ENTITLED

**"PHYTOCHEMICAL SCREENING OF TRACHYSpermum AMMI PLANT
AND SYNTHESIS OF SILVER NANOPARTICLES"**

SUBMITTED TO

**K.B.C. NORTH MAHARASTRA UNIVERSITY,
JALGAON**

SUBMITTED BY

Ms. SAMRUDDHI ANIL DESHPANDE

Ms. KARANKAL ROHINI DHYANESHWAR

Ms. PATIL MRUNAL SUNIL

Ms. PATIL POONAM LOTAN

Ms. JAIN PALLAVI PRAKASH

UNDER THE GUIDENCE

Dr.Mrs.M.S.PATIL NUTAN MARATHA COLLEGE , JALGAON (2022-2023)

NUTAN MARATHA COLLEGE, JALGAON (2021-2022)

DEPARTMENT OF CHEMISTRY

J.D.M.V.P'S Co-op SAMAJ'S SHRI.S.S. PATIL ARTS, SHRI. BHAUSAHEB
T.T. SALUNKHE COMMERCE AND SHIR.G.R.PANDIT SCIENCE COLLEGE,

JALGAON-425001

NAAC ACREDITED "B+" GRADE



CERTIFICATE

This is certifying that the project on entitled

**"PHYTOCHEMICAL SCREENING OF TRACHYSPERMUM AMMI PLANT
AND SYNTHESIS OF SIVER NANOPARTICLES"**

HAS BEEN SUBMITTED BY

Ms. SAMRUDDHI ANIL DESHPANDE


Ms. KARANKAL ROHINI DHYANESHWAR

Ms. PATIL MRUNAL SUNIL

Ms. PATIL POONAM LOTAN

Ms. JAIN PALLAVI PRAKASH

In the partial fulfilment and requirement for the award of the degree
of MASTER OF SCIENCE (Organic chemistry) under the K.B.C NORTH
MAHARASHTRA UNIVERSITY, JALGAON carried out under the
supervision and guidance.


Dr. Mrs. M.S. Patil
Project in charge


Dr. Mrs. M.S. PATIL

Head of department
Chemistry Dept.

Shri S. S. Patil Arts Sri Bhausaheb T. T.
Salunkhe Com. and Shir G. R. Pandit
Science College, Jalgaon

NUTAN MARATHA COLLEGE 2022-2023-2139

P.G.DEPARTMENT OF CHEMISTRY
NAAC ACREDITED "B+" GRADE
J.D.M.V.P'S Co-op SAMAJ'S SHRI.S.S. PATIL ARTS,
SHRI. BHAUSAHEB T.T. SALUNKHE COMMERCE AND
SHIR.G.R.PANDIT SCIENCE COLLEGE,
JALGAON-425001

DECLARATION

We hereby declare that the M.SC. research project entitled "PHYTOCHEMICAL SCREENING OF TRACHYSPERMUM AMMI PLANT AND SYNTHESIS OF SILVER NANOPARTICLES" has completed and written by us under the supervision of Dr. M.S.patil the present work is not been copied from any other project report submitted to university or examining body

DATE:-

PLACE:-JALGAON

NAME:- Ms. SAMRUDDHI ANIL DESHPANDE

Ms. KARANKAL ROHINI DHYANESHWAR

Ms. PATIL MRUNAL SUNIL

Ms. PATIL POONAM LOTAN

Ms. JAIN PALLAVI PRAKASH

A SHORT RESEARCH PROJECT DEPARTMENT OF CHEMISTRY

J.D.M.V.P'S Co.op SAMAJ'S SHRI.S.S. PATIL ARTS , SHRI. BHAUSAHEB T.T.
SALUNKHE COMMERCE AND SHRI.G.R.PANDIT SCIENCE COLLEGE,

JALGAON-425001

NAAC ACREDITED "B+" GRADE



ENTITLED

"Synthesis of Azo compounds by coupling of Substituted diazonium salt with 2-Chloro-phenol"

SUBMITTED TO

K.B.C. NORTH MAHARASTRA UNIVERSITY,

JALGAON

SUBMITTED BY

Mr. PATIL SATISH ANANDA

Mr. PATIL SAURABH SANJAY

UNDER THE GUIDENCE

Dr.Mrs.M.S.PATIL

NUTAN MARATHA COLLEGE , JALGAON (2022-2023)

3/2

DEPARTMENT OF CHEMISTRY

J.D.M.V.P'S Co.op SAMAJ'S SHRI.S. PATIL ARTS , SHRI. BHUSAHEB T.T. SALUNKHE COMMERCE AND SHRI.G.R.PANDIT SCIENCE COLLEGE.

JALGAON-425001

NAAC ACREDITED "B+" GRADE



CERTIFICATE


This is certifying that the project on entitled
"Synthesis of Azo compounds by coupling of Substituted diazonium salt with 2-Chloro phenol"


HAS BEEN SUBMITTED BY

Mr. PATIL SATISH ANANDA

Mr. PATIL SAURABH SANJAY

In the partial fulfilment and requirement for the award of the degree of
MASTER OF SCIENCE (Organic chemistry) under the K.B.C NORTH MAHARASHTRA UNVIERSITY,
JALGAON carried out under the supervision and guidance.


Dr.S.P.Mote **Sr**
Project in charge


Dr.Mrs. M.S.Patil
Head of Department
HEAD OF THE
Chemistry Dept.
Shri S. S. Patil Arts Shri Bhusaheb T. T.
Salunkhe Com. and Shri G. R. Pandit
Science College, Jalgaon

PG DEPARTMENT OF CHEMISTRY

NAAC ACREDITED "B+" GRADE

J.D.M.V.P'S Co.op SAMAJ'S SHRI.S.S. PATIL ARTS ,
SHRI. BHAUSAHEB T.T. SALUNKHE COMMERCE AND
SHIR.G.R.PANDIT SCIENCE COLLEGE,

JALGAON-425001

DECLARATION

We here by declare that the M.SC. research project entitled "Green synthesis of silver nanoparticles and their phytochemical analysis from natural products." has completed and written by us under the supervision of Dr. M.S.patil the present work is not been copied from any other project report submitted to university or examining body

DATE :-

PLACE :- JALGAON

NAME :-

Mr. PATIL SATISH ANANDA

Mr. PATIL SAURABH SANJAY

(4/1)

A SHORT RESEARCH PROJECT DEPARTMENT OF CHEMISTRY
J.D.M.V.P'S Co.op SAMAJ'S SHRI S.S. PATIL ARTS , SHRI. BHAUSAHEB T.T.
SALUNKHE COMMERCE AND SHRI.G.R.PANDIT SCIENCE COLLEGE,

JALGAON-425001

NAAC ACREDITED "B+" GRADE



ENTITLED

**"Synthesis and Characterisation of Organic Fertilizer using Natural
organic material"**

SUBMITTED TO

K.B.C. NORTH MAHARASTRA UNIVERSITY,

JALGAON

SUBMITTED BY

Mr. HATKAR KISHOR WALMIK

Mr. BHOI GOPAL JAGANNATH

Mr. GIRASE ANAND RAJENDRASING

Mr. CHAUDHARI RAHUL KISHOR

Mr. CHAUDHARI ROHIT ANIL

UNDER THE GUIDENCE

Dr. Mrs. M.S. PATIL

NUTAN MARATHA COLLEGE , JALGAON (2022-2023)

DEPARTMENT OF CHEMISTRY

J.D.M.V.P'S Co.op SAMAJ'S SHRI.S.S. PATIL ARTS, SHRI. BHUSAHEB T.T.
SALUNKHE COMMERCE AND SHRI.G.R.PANDIT SCIENCE COLLEGE,

JALGAON-425001

NAAC ACREDITED "B+" GRADE



CERTIFICATE

This is certifying that the project on entitled

"Synthesis and Characterisation of Organic Fertilizer using Natural
organic material"

HAS BEEN SUBMITTED BY

Mr. HATKAR KISHOR WALMIK

Mr. BHOI GOPAL JAGANNATH

Mr. GIRASE ANAND RAJENDRASING

Mr. CHAUDHARI RAHUL KISHOR

Mr. CHAUDHARI ROHIT ANIL

In the partial fulfilment and requirement for the award of the degree of
MASTER OF SCIENCE (Organic chemistry) under the K.B.C NORTH MAHARASHTRA UNVIERSITY,
JALGAON carried out under the supervision and guidance.

Dr. Mrs. M.S. Patil

Project in charge

Dr. Mrs. M.S. Patil

Head of ~~Department~~
Chemistry Dept.

Shri S. S. Patil Arts Shri Bhusaheb T. T.
Salunkhe Com. and Shri G. R. Pandit
Science College, Jalgaon

PG DEPARTMENT OF CHEMISTRY

NAAC ACREDITED "B+" GRADE

**J.D.M.V.P'S Co.op SAMAJ'S SHRI.S.S. PATIL ARTS ,
SHRI. BHAUSAHEB T.T. SALUNKHE COMMERCE AND
SHRI.G.R.PANDIT SCIENCE COLLEGE,
JALGAON-425001**

DECLARATION

We here by declare that the M.SC. research project entitled "Synthesis and Characterisation of Organic Fertilizer using Natural organic material" has completed and written by us under the supervision of Dr. M.S.patil the present work is not been copied from any other project report submitted to university or examining body

DATE :-30/05/2023

PLACE :- JALGAON

NAME :-

- Mr. HATKAR KISHOR WALMIK
- Mr. BHOI GOPAL JAGANNATH
- Mr. GIRASE ANAND RAJENDRASIG
- Mr. CHAUDHARI RAHUL KISHOR
- Mr. CHAUDHARI ROHIT ANIL

5/2

DEPARTMENT OF CHEMISTRY

J.D.M.V.P'S Co.op SAMAJ'S SHRI.S.S. PATIL ARTS , SHRI. BHAUSAHEB T.T. SALUNKHE COMMERCE AND SHRI.G.R.PANDIT SCIENCE COLLEGE,

JALGAON-425001

NAAC ACREDITED "B+" GRADE.



CERTIFICATE

This is certifying that the project on entitled

"Green synthesis of silver nanoparticles and their phytochemical analysis from natural products"

HAS BEEN SUBMITTED BY

Mr. MAHAJAN OJAS RAJKUMAR

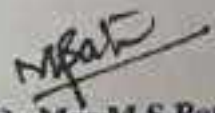
Mr. PATIL KUNAL ANIL

Mr. PATIL DIPAK BALU

Mr. MOHASIN AHAMAD ABDUL QADIM MANYAR

Mr. KHAIRKAR GIRISH GOVINDA

In the partial fulfilment and requirement for the award of the degree of MASTER OF SCIENCE (Organic chemistry) under the K.B.C NORTH MAHARASHTRA UNIVERSITY, JALGAON, carried out under the supervision and guidance.


Dr. Mrs. M.S. Patil
Project in charge


Dr. Mrs. M.S. Patil
Head of Department
HEAD OF THE
Chemistry Dept.
Shri S. S. Patil Arts Shri Bhausaheb T. T.
Salunkhe Com. and Shri G. R. Pandit
Science College, Jalgaon

A SHORT RESEARCH PROJECT DEPARTMENT OF CHEMISTRY

J.D.M.V.P'S Co.op SAMAJ'S SHRI.S.S. PATIL ARTS , SHRI. BHAUSAHEB T.T.
SALUNKHE COMMERCE AND SHIR.G.R.PANDIT SCIENCE COLLEGE,

JALGAON-425001

NAAC ACREDITED "B+" GRADE



ENTITLED

"Green synthesis of silver nanoparticles and their phytochemical
analysis from natural products."

SUBMITTED TO

K.B.C. NORTH MAHARASTRA UNIVERSITY,

JALGAON

SUBMITTED BY

Mr. MAHAJAN OJAS RAJKUMAR

Mr. PATIL KUNAL ANIL

Mr. PATIL DIPAK BALU

Mr. MOHASIN AHAMAD ABDUL QADIM MANYAR

Mr. KHAIRKAR GIRISH GOVINDA

UNDER THE GUIDENCE

Dr. Mrs. M.S. PATIL

NUTAN MARATHA COLLEGE, JALGAON (2022-2023)

PG DEPARTMENT OF CHEMISTRY

NAAC ACREDITED "B+" GRADE

J.D.M.V.P'S Co.op SAMAJ'S SHRES.S. PATIL ARTS ,
SHRI. BHAUSAHEB T.T. SALUNKHE COMMERCE AND
SHIR.G.R.PANDIT SCIENCE COLLEGE,

JALGAON-425001

DECLARATION

We here by declare that the M.SC. research project entitled "Green synthesis of silver nanoparticles and their phytochemical analysis from natural products." has completed and written by us under the supervision of Dr. M.S.patil the present work is not been copied from any other project report submitted to university or examining body

DATE :-

PLACE :- JALGAON

NAME :-

Mr. MAHAJAN OJAS RAJKUMAR
Mr. PATIL KUNAL ANIL

Mr. PATIL DIPAK BALU

Mr. KHAIRKAR GIRISH GOVINDA

Mr. MOHASIN AHAMAD ABDUL

QADIM MANYAR .

A SHORT RESEARCH PROJECT DEPARTMENT OF CHEMISTRY

J.D.M.V.P'S Co.op SAMAJ'S SHRI.S.S. PATIL ARTS , SHRI. BHAUSAHEB T.T.
SALUNKHE.COMMERCE AND SHIR.G.R.PANDIT SCIENCE COLLEGE,

JALGAON-425001

NAAC ACREDITED "B+" GRADE



ENTITLED

"Phytochemical analysis of some medicinal plant by using different solvent."

SUBMITTED TO

K.B.C. NORTH MAHARASTRA UNIVERSITY,

JALGAON

SUBMITTED BY

Mr. WAGH KIRAN SHANTILAL

Mr. BAVISKAR VIKAS RAJENDRA

Mrs. PAWAR PRAPTI PRASHANT

Mrs. THORAT ASHWINI HIRALAL

Mr. GIRASE AKASH INDRASING

Mr. PATIL SACHIN KAILAS

UNDER THE GUIDENCE

Dr.Mrs.M.S.PATIL

NUTAN MARATHA COLLEGE , JALGAON (2022-2023)

DEPARTMENT OF CHEMISTRY

J.D.M.V.P'S Co.op SAMAJ'S SHRI.S.S. PATIL ARTS , SHRI. BHAUSAHEB T.T.
SALUNKHE COMMERCE AND SHRI.G.R.PANDIT SCIENCE COLLEGE,

JALGAON-425001

NAAC ACREDITED "B+" GRADE



CERTIFICATE

This is certifying that the project on entitled

"Phytochemical analysis of some medicinal plant by using different solvent"

HAS BEEN SUBMITTED BY

Mr. WAGH KIRAN SHANTILAL

Mr. BAVISKAR VIKAS RAJENDRA

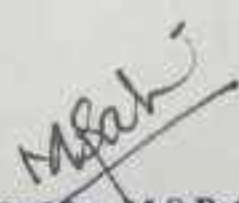
Mrs. PAWAR PRAPTI PRASHANT

Mrs. THORAT ASHWINI HIRALAL


Mr. GIRASE AKASH INDRASING

Mr. PATIL SACHIN KAILAS

In the partial fulfilment and requirement for the award of the degree of
MASTER OF SCIENCE (Organic chemistry) under the K.B.C NORTH MAHARASHTRA UNIVERSITY,
JALGAON carried out under the supervision and guidance.


Dr. Mrs. M.S. Patil

Project in charge


Dr. Mrs. M.S. Patil

Head of the
Chemistry Dept.

Shri S. S. Patil Arts Shri Bhausaheb T. T.
Salunkhe Com. and Shri G. R. Pandit
Science College, Jalgaon

PG DEPARTMENT OF CHEMISTRY

NAAC ACREDITED "B+" GRADE

J.D.M.V.P'S Co.op SAMAJ'S SHRI.S.S. PATIL ARTS ,
SHRI. BHAUSAHEB T.T. SALUNKHE COMMERCE AND
SHIR.G.R.PANDIT SCIENCE COLLEGE,



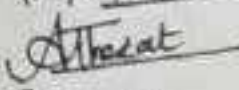
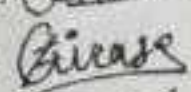
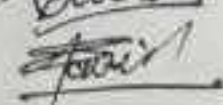
JALGAON-425001

DECLARATION

We here by declare that the M.SC. Research project entitled "Phytochemical analysis of some medicinal plant by using different solvent." has completed and written by us under the supervision of Dr.M.S.patil the present work is not been copied from any other project report submitted to university or examining body

DATE :- 06/06/2023

PLACE :- JALGAON NAME :-

Mr.WAGH KIRAN SHANTILAL 
Mr.BAVISKAR VIKAS RAJENDRA 
Mrs.PAWAR PRAPTI PRASHANT P. P. Pawar
Mrs.THORAT ASHWINI HIRALAL 
Mr.GIRASE AKASH INDRASING 
Mr. PATIL SACHIN KAILAS 

A SHORT RESEARCH PROJECT DEPARTMENT OF CHEMISTRY
J.D.M.V.P'S Co.op SAMAJ'S SHRI.S.S. PATIL ARTS , SHRI.
BHAUSAHEB T.T.SALUNKHE COMMERCE AND SHIR.G.R.PANDIT
SCIENCE COLLEGE,JALGAON-425001
NAAC ACREDITED "B+" GRADE



ENTITLED

"Green Synthesis of Aspirin and its Comparative Study with
Traditional Methods."

SUBMITTED TO

K.B.C. NORTH MAHARASTRA UNIVERSITY,

JALGAON

SUBMITTED BY,

Mr. SURYAWANSHI LALIT SANJAY

Mr. PATIL RAHUL DILIP

Mr. PAWAR VIKAS SUKDEO

Mr. PATIL VIVEK RAMRAO

Mr. PATIL SANJOG RAJENDRA

Mr. PAWAR MAYUR MUKUNDA

Mr. SHINDE RUSHIKESH DIWAKAR

UNDER THE GUIDENCE

Dr.Mrs.M.S.PATIL

NUTAN MARATHA COLLEGE , JALGAON (2022-2023)

NUTAN MARATHA COLLAGE JALGOAN

DEPARTMENT OF CHEMISTRY

J.D.M.V.P'S Co.op SAMAJ'S SHRI.S.S. PATIL ARTS , SHRI.
BHAUSAHEB T.T.SALUNKHE COMMERCE AND SHRI.G.R.PANDIT
SCIENCE COLLEGE,JALGAON-425001
NAAC ACREDITED "B+" GRADE



CERTIFICATE

This is certifying that the project on entitled

"Green Synthesis of Aspirin and its Comparative Study with Traditional Methods"

HAS BEEN SUBMITTED BY

Mr. SURYAWANSHI LALIT SANJAY

Mr. PATIL RAHUL DILIP

Mr. PAWAR VIKAS SUKDEO

Mr. PATIL VIVEK RAMRAO

Mr. PATIL SANJOG RAJENDRA

Mr. PAWAR MAYUR MUKUNDA

Mr. SHINDE RUSHIKESH DIWAKAR

In the partial fulfilment and requirement for the award of the degree of
MASTER OF SCIENCE (Organic chemistry) under the K.B.C NORTH MAHARASHTRA
UNVIERSITY , JALGAON carried out under the supervision and guidance.


Dr. Mrs. M.S. Patil

Project in charge


Dr. Mrs. M.S. Patil

HEAD OF DEPT.
Chemistry Dept.
Dr. Mrs. M.S. Patil
Head of Department

Scientific College and Shri. G. R. Pandit
Science College, Jalgaon
NUTAN MARATHA COLLEGE JALGAON

P.G.DEPARTMENT OF CHEMISTRY

NAAC ACREDITED "B+" GRADE

J.D.M.V.P'S Co.op SAMAJ'S SHRI.S.S. PATIL ARTS ,
SHRI. BHAUSAHEB T.T. SALUNKHE COMMERCE AND
SHIR.G.R.PANDIT SCIENCE COLLEGE,

JALGAON-425001

DECLARATION

We here by declare that the M.SC. research project entitled "Green Synthesis of Aspirin and its Comparative Study with Traditional Methods " has completed and written by us under the supervision of Dr. M.S.patil the present work is not been copied from any other project report submitted to unviersity or examining body

DATE

PLACE :- JALGAON

NAME :-

Mr. SURYAWANSHI LALIT SANJAY

Mr. PATIL RAHUL DILIP

Mr. PAWAR VIKAS SUKDEO

Mr. PATIL VIVEK RAMRAG

Mr. PATIL SANJOG RAJENDRA

Mr. PAWAR MAYUR MUKUNDA

Mr. SHINDE RUSHIKESH DIWAKAR

A
Dissertation on

**HYDROPONICS : AN UPCOMING AND INNOVATIVE
WAY OF FUTURE FARMING**

Submitted to



**J.D.M.V.P. SAMAJ'S , SHRI. S. S. PATIL ART'S, SHRI. BHAUSAHEB T.
T. SAALUNKHE COMMERCE AND SHRI I. G. R. PANDIT SCIENCE
COLLEGE.**

NUTAN MARTHA COLLEGE, JALGAON

In Partial Fulfillment of

M. SC. in Botany

Submitted by

Aachal Vishwanath Kadam

M. Sc. (Botany) II nd Year

Supervised By

Prof. Dr. L. P. Deshmukh

Principal and Head, Department of Botany

**J.D.M.V.P. SAMAJ'S , SHRI. S. S. PATIL ART'S , SHRI . BHAUSAHEB T.
T. SAALUNKHE COMMERCE AND SHRI . G. R. PANDIT SCIENCES
COLLEGE , (NUTAN MARATHA COLLEGE) , JALGAON.**


2023

CERTIFICATE

This is certify that the dissertation work entitled **HYDROPONIC :AN UPCOMING AND INNOVATIVE WAY OF FUTURE FARMING** is the original work carried out by **Aachal Vishwanath Kadam** under the supervision of **prof. Dr. L. P. Deshmukh** for partial fulfillment of M. Sc. (Botany) during the academic year 2022-24 at Nutan Maratha collage, North Maharashtra University, Jalgaon, MS, India.

Submitted for the project viva-voce examination held on.....


Miss- Kiran P. Patil
Project Supervisor


Prof. Dr. L. P. Deshmukh
Principal,
Reader and Head,
Department of Botany,
Nutan Maratha Collage, Jalgaon.


External Examiner

DECLARATION

I confirm that the project work titled **HYDROPONICS :AN UPCOMING AND INNOVATIVE WAY OF FUTURE FARMING** being submitted in partial fulfillment for the **M. SC. (Botany)** is the original work carried out by us. It was not the formed the part of any other project work submitted for the degree ;either in this or other university.

Aachal Vishwanath Kadam

I certify that the declaration made above by the candidate above.



Prof. Dr. L. P. Deshmukh

Principal and Head, Department of Botany
NUTAN MARATHA COLLEGE, JALGAON.



**PRINCIPAL
J.D.M.V.P.S.**

Shri S.S.Patil Arts, Shri Bhausaheb
T.T.Salunkhe Commerce and
Shri.G.R.Pandit Science College, Jalgaon

ACKNOWLEDGEMENT

It is an honor and heartfelt pleasure to express sincere gratitude to our project supervisor to **Prof. Dr. L. P. Deshmukh**, Principal and Head, Department of Botany, Nutan Maratha Collage, Jalgaon. We are indeed indebted to him for his expert guidance constructive criticism, through discussion and continuous inspiration through out of the course and especially during dissertation. Besides we are thankful to **Mrs. Nafisa tadvi madam** ,**Ms.Kiran patil madam** For their help during work.

Besides we are also greatly indebted to non-teaching staff members, research scholars and our collogues for their cooperation in ever ways possible. last but not the least ;we are heartily thankful to our parents and friends for their inspiration through the course.

Thanking all.

Aachal Vishwanath Kadam

A Dissertation on

**Floral diversity of family Asteraceae from Manudevi forest,
Jalgaon district, Maharashtra.**

Submitted to



**J.D.M.V.P. SAMAJ'S, SHRI S. S. PATIL ART'S, SHRI. BHAUSAHEB T. T.
SALUNKHE COMMERCE AND SHRI. G. R. PANDIT SCIENCE**

COLLEGE

NUTAN MARATHA COLLEGE, JALGAON

In Partial Fulfillment of

M.Sc. in Botany

Submitted by

Aditi Kailas Patil

M.Sc. (Botany) IInd Year

Supervised By

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Principal and Head, Department of Botany

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2023

CERTIFICATE

This is to certify that the dissertation work entitled "Floral diversity of family Asteraceae from Manudevi forest, Jalgaon district, Maharashtra" is the original work carried out by **Aditi Kailas Patil**, under the supervision of **Prof. Dr. L. P. Deshmukh** for partial fulfillment of M.Sc. (Botany) during the academic year 2022-23 at Nutan Maratha College, North Maharashtra University, Jalgaon, MS, India.

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I confirm that the project work titled "Study of floral diversity of Asteraceae family from Manudevi forest, Jalgaon district, Maharashtra " being submitted in partial fulfillment for the **M.Sc. (Botany)** is the original work carried out by us. It was not the formed the part of any other project work submitted for the degree; either in this or other university.

Aditi

Aditi Kailas Patil

I certify that the declaration made above by the candidate above.



Prof. Dr. L. P. Deshmukh


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ACKNOWLEDGEMENT

It is an honor and heartfelt pleasure to express sincere gratitude to our project supervisor to **Prof. Dr. L. P. Deshmukh**, Principal and Head, Department of Botany, Nutan Maratha College, Jalgaon. We are indeed indebted to him for his expert guidance constructive criticism, through discussion and continuous inspiration through out of the course and especially during dissertation. Besides we are thankful to **Prof. Mrs. Nafisa Tadavi Madam, Prof. Kiran Patil madam** for their help during work.

Besides we are also greatly indebted to non-teaching staff members, research scholars and our collogues for their cooperation in every ways possible. Last but not the least; we are heartily thankful to our parents and friends for their inspiration through the course.

Thanking all.



Aditi Kailas Patil

A Dissertation on

**Study of floral diversity of family Asteraceae from Manudevi forest,
Jalgaon district**

Submitted to



**J.D.M.V.P. SAMAJ'S, SHRI S. S. PATIL ART'S, SHRI. BHAUSAHEB T. T.
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2023

CERTIFICATE

This is to certify that the dissertation work entitled "Study of floral diversity of family Asteraceae from Manudevi forest, Jalgaon district" is the original work carried out by Chandralekha Chandrakant Pawar, under the supervision of Prof. Dr. L. P. Deshmukh for partial fulfillment of M.Sc. (Botany) during the academic year 2022-23 at Nutan Maratha College, North Maharashtra University, Jalgaon, MS, India.

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Prof. Dr. L. P. Deshmukh

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I confirm that the project work titled "Study of floral diversity of family Asteraceae from Manudevi forest, Jalgaon district" being submitted in partial fulfillment for the M.Sc. (Botany) is the original work carried out by us. It was not the formed the part of any other project work submitted for the degree; either in this or other university.



Chandralekha Chandrakant Pawar

I certify that the declaration made above by the candidate above.



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ACKNOWLEDGEMENT

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Thanking all.



Chandralekha Chandrakant Pawar

A
Dissertation on

**HYDROPONICS : AN UPCOMING AND INNOVATIVE
WAY OF FUTURE FARMING**

Submitted to



**J.D.M.V.P. SAMAJ'S , SHRI. S. S. PATIL ART'S, SHRI. BHAUSAHEB T.
T. SAALUNKHE COMMERCE AND SHRI I. G. R. PANDIT SCIENCE
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NUTAN MARTHA COLLEGE, JALGAON

In Partial Fulfillment of
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M. Sc. (Botany) II nd Year

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COLLEGE , (NUTAN MARATHA COLLEGE) , JALGAON .**

2023

CERTIFICATE

This is certify that the dissertation work entitled **HYDROPONIC :AN UPCOMING AND INNOVATIVE WAY OF FUTURE FARMING** is the original work carried out by **Kalyani Nandakishor Patil**, under the supervision of **prof. Dr. L. P. Deshmukh** for partial fulfillment of M. Sc. (Botany) during the academic year 2022-24 at Nutan Maratha collage, North Maharashtra University, Jalgaon, MS, India.

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I confirm that the project work titled **HYDROPONICS :AN UPCOMING AND INNOVATIVE WAY OF FUTURE FARMING** being submitted in partial fulfillment for the **M. SC. (Botany)** is the original work carried out by us. It was not the formed the part of any other project work submitted for the degree ;either in this or other university.

Kalyani Nandakishor Patil

I certify that the declaration made above by the candidate above.

Prof. Dr. L. P. Deshmukh

Principal and Head, Department of Botany
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ACKNOWLEDGEMENT

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Thanking all.

Kalyani Nandakishor Patil

A Dissertation on
**Floristic study of Family Euphorbiaceae from
Manudevi Forest, Jalgaon district.**

Submitted to



**J.D.M.V.P. SAMAJ'S, SHRI S. S. PATIL ART'S, SHRI. BHAUSAHEB T. T.
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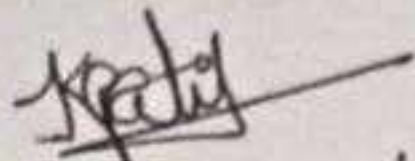
**COMMERCE AND SHRI. G. R. PANDIT SCIENCE COLLEGE (NUTAN
MARATHA COLLEGE), JALGAON**


2023

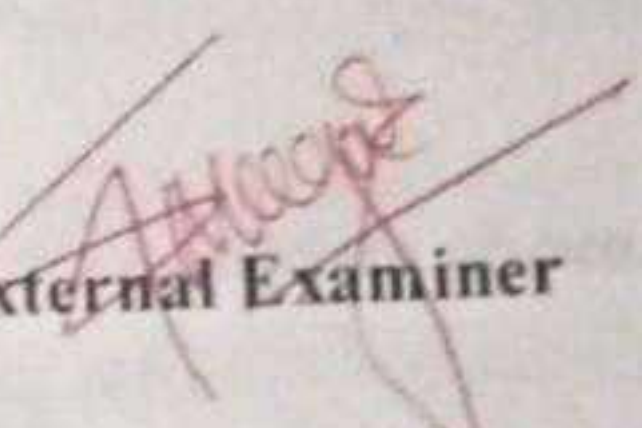
CERTIFICATE

This is certify that the dissertation work entitled " Floristic study of family Euphorbiaceae from Manudevi Forest, Jalgaon district " is the original work carried out by Sana Kausar Qurban Khan Tadvi, under the supervision of Prof. Dr. L. P. Deshmukh for partial fulfillment of M.Sc. (Botany) during the academic year 2022-23 at Nutan Maratha College, North Maharashtra University, Jalgaon, MS, India.

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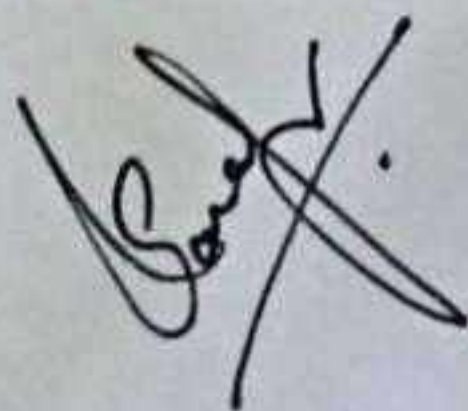
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Besides we are also greatly indebted to non-teaching staff members, research scholars and our colleagues for their cooperation in every ways possible. Last but not the least; we are heartily thankful to our parents and friends for their inspiration through the course.

Thanking all.

Sana Kausar Qurban Khan Tadvi



A Dissertation on
**Floral Diversity of Family Convolvulaceae from
Manudevi Forest, Jalgaon.**

Submitted to



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CERTIFICATE

This is certify that the dissertation work entitled " **Floral diversity of Family Convolvulaceae from Manudevi Forest, Jalgaon** " is the original work carried out by Shaikh Uzma Tahesin Mohammed Azim, under the supervision of **Prof. Dr. L. P. Deshmukh** for partial fulfillment of M.Sc. (Botany) during the academic year 2022-23 at Nutan Maratha College, North Maharashtra University, Jalgaon, MS, India.

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I confirm that the project work titled "**Floral diversity of Family Convolvulaceae from Manudevi Forest, Jalgaon**" being submitted in partial fulfillment for the **M.Sc. (Botany)** is the original work carried out by us. It was not the formed the part of any other project work submitted for the degree; either in this or other university.

Shaikh Uzma Tahesin Mohammed Azim

I certify that the declaration made above by the candidate above.


Prof. Dr. L. P. Deshmukh

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ACKNOWLEDGEMENT

It is an honor and heartfelt pleasure to express sincere gratitude to our project supervisor to **Prof. Dr. L. P. Deshmukh**, Principal and Head, Department of Botany, Nutan Maratha College, Jalgaon. We are indeed indebted to him for his expert guidance constructive criticism, through discussion and continuous inspiration through out of the course and especially during dissertation. Besides we are thankful to **Prof. Mrs. Nafisa Tadavi Madam, Prof. Kiran Patil Madam** for their help during work.

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Thanking all.

Shaikh Uzma Tahesin Mohammed Azim

A Dissertation on

**Floral diversity of family Acanthaceae from Manudevi forest,
Jalgaon district.**

Submitted to



**J.D.M.V.P. SAMAJ'S, SHRI S. S. PATIL ART'S, SHRI. BHAUSAHEB T. T.
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In Partial Fulfillment of

M.Sc. in Botany

Submitted by

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M.Sc. (Botany) IInd Year

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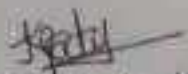
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MARATHA COLLEGE), JALGAON**


2023

CERTIFICATE

This is to certify that the dissertation work entitled "Floral diversity of Acanthaceae family from Manudevi forest, Jalgaon district" is the original work carried out by **Shifa Khan Zakir Khan**, under the supervision of **Prof. Dr. L. P. Deshmukh** for partial fulfillment of M.Sc. (Botany) during the academic year 2022-23 at Nutan Maratha College, North Maharashtra University, Jalgaon, MS, India.

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External Examiner

DECLARATION

I confirm that the project work titled "Floral diversity of Acanthaceae family from Manudevi forest, Jalgaon district " being submitted in partial fulfillment for the M.Sc. (Botany) is the original work carried out by us. It was not the formed the part of any other project work submitted for the degree; either in this or other university.

Shifa Khan Zakir Khan

I certify that the declaration made above by the candidate above.



Prof. Dr. L. P. Deshmukh

Principal and Head, Department of Botany,
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ACKNOWLEDGEMENT

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Thanking all.

Shifa Khan Zakir Khan

A Dissertation on

Study of floral diversity of Fabaceae family from Manudevi forest,
Jalgaon district.

Submitted to



J.D.M.V.P. SAMAJ'S, SHRI S. S. PATIL ART'S, SHRI. BHAUSAHEB T. T.
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M.Sc. in Botany

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MARATHA COLLEGE), JALGAON


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CERTIFICATE

This is certify that the dissertation work entitled "Study of floral diversity of Fabaceae family from Manudevi forest, Jalgaon distric" is the original work carried out by **Snehal Ganesh Ranit**, under the supervision of **Prof. Dr. L. P. Deshmukh** for partial fulfillment of M.Sc. (Botany) during the academic year 2022-23 at Nutan Maratha College, North Maharashtra University, Jalgaon, MS, India.

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