

Department of Plant Sciences

**Ethnobotanical status of *Prunus armeniaca* Linn. In Tehsil Chaupal of District Shimla,
Himachal Pradesh**

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial

Fulfillment of the degree of

Masters of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

Prof. Pardeep Kumar

By

Aditi Himta

(CUHP20PLS01)

June 2022

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This is to certify that the dissertation entitled “**Ethnobotanical status of *Prunus armeniaca* Linn. in Tehsil Chaupal of District Shimla, Himachal Pradesh**” submitted by **Aditi Himta CUHP20PLS01 D/O Sh. Santosh Himta** to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of the degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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**The Effect of Salicylic Acid on Growth and Biochemical Characters in UV-C
Radiation Stressed Tomato Plants (*Solanum lycopersicum* L.)**

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial

Fulfillment of the degree of

Masters of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



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**Establishment of *in vitro* cultures of *Valeriana jatamansi*
Jones using different plant growth regulators**

A dissertation

Submitted to the Central University of Himachal Pradesh for the partial
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Masters of Science in Plant Science (Botany)

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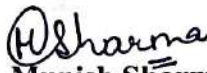
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This to certify that the dissertation entitled "Establishment of *in vitro* cultures of *Valeriana jatamansi* Jones using different plant growth regulators" submitted by Ankita Rana (CUHP20PLS04) D/O Sh. Karnail Rana to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Plant Science (Botany) has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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A Review on the “**Role of Anti-depressant Agents derived from selected
Flowering Plants**”

Submitted to the Central University of Himachal Pradesh for the Partial

Fulfilment of the degree of

Masters of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

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By

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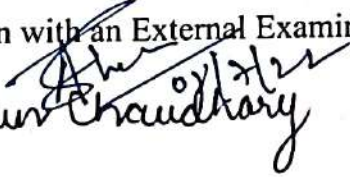
[Established under the Central Universities Act 2009]

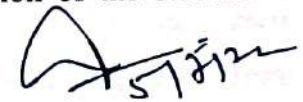
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This to certify that the dissertation entitled "A Review on Role of Antidepressant agents derived from selected Flowering Plants" submitted by Arti Chauhan (CUHP20PLS05) D/O Sh. Surender Kumar to the Central University of Himachal Pradesh, Dharamshala in partial fulfilment of the requirements for the award of degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.

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**The Use of Halotolerant Plant Growth Promoting Rhizobacteria in
Sustainable Agriculture**

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial

Fulfillment of the degree of

Masters of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

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By

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This is to certify that the dissertation entitled "The Use of Halotolerant Plant Growth Promoting Rhizobacteria in Sustainable Agriculture" submitted by Damini (CUHP20PLS06) D/O Sh. Narender Pal to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of the degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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Effect of Heavy Metal Stress on the morphology of *Solanum nigrum* growing under soil conditions

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial
Fulfillment of the degree of

Masters of Science in Plant Science (Botany)

In the School of Life Sciences

In the Department of Plant Science



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This to certify that the dissertation entitled “Effect of heavy metal stress on the morphology of *Solanum nigrum* growing under soil conditions” submitted by Diksha (CUHP20PLS07) D/O Sh. Jagat Ram to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Plant Science (Botany) has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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**Effect of Mannitol Induced Seed Priming in the Salinity Tolerance of Brinjal
(*Solanum melongena*) Seeds**

A Dissertation

Submitted to the Central University of Himachal Pradesh for the Partial

Fulfillment of the Degree of

Master of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

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By

Diksha

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This to certify that the dissertation entitled "Effect of Mannitol Induced Seed Priming in the Salinity Tolerance of Brinjal Seeds (*Solanum melongena*)" submitted by Diksha (CUHP20PLS08) D/O Sh. Ravinder Kumar to the Central University of Himachal Pradesh, Dharamshala in partial fulfilment of the requirements for the award of degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.

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Dr. Parveen Sharma

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**Ethnobotanical survey of *Ficus carica* among local residents of
Tehsil Shahpur in District Kangra of Himachal Pradesh**

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial

Fulfillment of the degree of

Masters of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

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This is to certify that the dissertation entitled, "Ethnobotanical survey of *Ficus carica* among local residents of Tehsil Shahpur in Kangra District of Himachal Pradesh". submitted in partial fulfillment of the requirements for the award of the degree of **Master of Science (Plant science)** in the Central University of Himachal Pradesh, Dharamshala is a bonafide research work carried out by **ISHA KUMARI** under my supervision and that no part of this thesis has been submitted for any other degree or diploma.

The assistance and help received during the course of this investigation have been fully acknowledged.

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**Ethnobotanical Status of *Grewia optiva* (J.R. Drumm. ex Burret) as a
Multipurpose Tree in Tehsil Shahpur of District Kangra (H.P.)**

A Dissertation

Submitted to the Central University of Himachal Pradesh for the Partial

Fulfillment of the Degree of

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In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

Prof. Pardeep Kumar

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This is to certify that dissertation entitled “**Ethnobotanical Status of *Grewia optiva* (J.R. Drumm. ex Burret) as a Multipurpose Tree in Tehsil Shahpur of District Kangra (H.P.)**” submitted by **Kajal Parihar** (CUHP20PLS10) D/O Mr. Sunil Parihar to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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**Effect of osmopriming on salinity stress tolerance of
Tomato variety - Golden Seeds Tomato Vaishnavi – 2082**

A Dissertation

Submitted to the Central University of Himachal Pradesh for the partial

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In the school of Life Sciences

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This to certify that the dissertation entitled "Effect of osmopriming on salinity stress tolerance of Tomato variety - Golden Seeds Tomato Varshnavi-2082" submitted by Kanchan (CUHP20PLS11) D/O Sh. Pawan Kumar to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.

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Supervisor

Dr. Parveen Sharma

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Signature of Prof. Tardeep Kumar
Prof. Tardeep Kumar

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Rhizofiltration as an Effective Approach for Removal of Heavy Metals from Aqueous Environment

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial
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Masters of Science in Plant Science (Botany)

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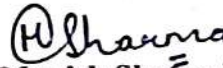
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This to certify that the dissertation entitled "Rhizofiltration as an Effective Approach for Removal of Heavy Metal From Aqueous Environment" submitted by KM Divya Pawar (CUHP20PLS12) D/O Sh. Manoj Kumar to the Central University of Himachal Pradesh, Dharamshala in partial fulfilment of the requirements for the award of degree of Master of Science in Plant Science (Botany) has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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A Review on the Botanicals In Organic Agriculture

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial

Fulfillment of the degree of

Masters of Science In Plant Science

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

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By

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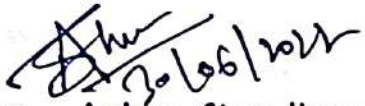
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This is to certify that the dissertation entitled “**Botanicals in Organic Agriculture**” submitted by **Kushal Thakur CUHP20PLS13 S/O Karan Singh** to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of the degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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***Saussurea costus* (Falc) Lipsch. A Review on Its Ethnomedicinal uses,
Phytochemistry and Pharmacology**

A dissertation

Submitted for the purpose to fulfill

The Requirement

Of the degree of

Master of Science in Plant Science

In the school of life Sciences

In the department of Life Science



Under the guidance of

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**Elicitation approach for *in vitro* regeneration of
Salvia officinalis L.**

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial
Fulfillment of the degree of

Master of Science in Plant Science (Botany)

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

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“Allelopathic effect of aqueous leaf extract of *Parthenium hysterophorus* and *Urtica dioica* on the seed germination and growth parameters of *Capsicum annum* variety – Suraj mukhi”

A dissertation
submitted to Central University of Himachal Pradesh
for the partial Fulfillment of the degree
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In the Department of plant science



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This is to certify that the dissertation entitled, “Allelopathic effect of aqueous leaf extract of *Parthenium hysterophorus* and *Urtica dioica* leaves on the seed germination and growth parameters of *Capsicum annum* Variety – Suraj mukhi” submitted by Miss MONIKA VERMA (CUHP20PLS16)) D/o Sh. PARMOD KUMAR to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of the degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.

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Dr. Prof. Parveen Sharma
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**Commercial Cultivation of Lavender in Salooni Valley: Current Scenario
and its Future Prospectives**

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial

Fulfilment of the degree of

Masters of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



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Prof. Pardeep Kumar

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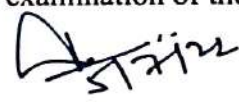
CERTIFICATE

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This is to certify that dissertation entitled “**Commercial Cultivation of Lavender in Salooni Valley: Current Scenario and its Future Prospectives**” submitted by **Nitin Sharma (CUHP20PLS17)** S/O Sh. Mool Raj to the Central University of Himachal Pradesh, Dharamshala in partial fulfilment of the requirements for the award of degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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A SURVEY ON KANGRA TEA AND ITS IMPORTANCE

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial

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In the School of Life Sciences

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This is to certify that the dissertation entitled "A survey on Kangra Tea and its importance" is submitted by Pallvi (CUHP20PLS18) D/O Sh. Trilok Chand to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of the degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.

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**“Effect of Proline Induced Seed Priming on Seedling Growth and Biochemical Parameters
of Brinjal Under Salinity Stress”**

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial Fulfillment of the

Degree of

Master of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

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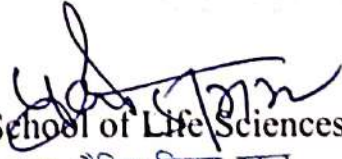
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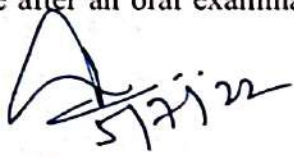

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Media manipulative approaches for *in vitro* propagation of *Rhynchosyilis retusa*

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial
Fulfillment of the degree of

Masters of Science in Plant Science (Botany)

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

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This to certify that the dissertation entitled “Media manipulative approaches for *in vitro* propagation of *Rhynchosytilis retusa*” submitted by Pooja Thakur (CUHP20PLS20) D/O Sh. Om Prakash to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Plant Science (Botany) has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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**A Systematic Review on Ethnobotany, Pharmacology and
Phytochemical Constituents of *Lonicera japonica***

A dissertation

Submitted for the purpose to fulfill

The Requirement

Of the degree of

Master of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



Under the guidance of

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This to certify that the dissertation entitled "A Systematic Review on Ethnobotany, Pharmacology and Phytochemical Constituents of *Lonicera japonica* submitted by Priya Verma (CUHP20PLS22) D/O Sh. Pawan Kumar to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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Dr. Pooveen Sharma

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**A Review on the Phytochemical, Ethnobotanical, and Pharmacological
Studies of *Thymus linearis***

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial

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In the School of Life Sciences

In the Department of Plant Science



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This is to certify that the dissertation entitled "A Review on the Phytochemical, Ethnobotanical, and Pharmacological Studies of *Thymus linearis*" submitted by Rakesh Kumar (CUHP20PLS23) S/O Sh. Govind Ram to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of the degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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अस्थायी शैक्षणिक ब्लॉक, शाहपुर
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Head of the Department

External Examiner


Dean of School of Life Sciences

आधिष्ठाता, जैविक विज्ञान स्कूल

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अस्थायी शैक्षणिक ब्लॉक / Temporary Academic Block

शाहपुर, कांगड़ा (द्वि.प्र.) / Shahpur, Kangra (H.P.)-176206

Effects of Plant Growth Regulators and Explant Type on *in vitro* multiplication of *Viola odorata* L.

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial
Fulfillment of the degree of

Masters of Science in Plant Science (Botany)

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

Dr. Munish Sharma

By

Saroj Kumari
(CUHP20PLS24)

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

June, 2022



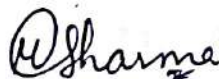
हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
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CERTIFICATE

Dated: 30/06/22

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Dharamshala, District Kangra,
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This to certify that the dissertation entitled "Effects of Plant Growth Regulators and Explant Type on *in vitro* multiplication of *Viola odorata* L." submitted by Saroj Kuamri (CUHP20PLS24) D/O Sh. Ravinder Kumar to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Plant Science (Botany) has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.




(Dr. Munish Sharma)

सहायक प्राध्यापक/Assistant Professor
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शाहपुर, कांगड़ा (हि.प्र.)/Shahpur, Kangra (H.P.)-176215

**“Effect of Proline Seed Priming on Growth and Biochemical Characters of
Tomato (*Solanum lycopersicum* L.) under Salinity Stress.”**

A Dissertation

Submitted to the Central University of Himachal Pradesh for the Partial

Fulfilment of the Degree of

Master of Sciences in Plant Science

In the School of Life Sciences

In the Department of Plant Sciences



Under the Supervision of

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By

Shivani

(CUHP20PLS25)

June, 2022

Central University of Himachal Pradesh



हिमाचल प्रदेश केंद्रीय विश्वविद्यालय
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Dharamshala, District Kangra,

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This is to certify that the dissertation entitled “ **Effect of proline seed priming on growth and biochemical characters of tomato (*Solanum lycopersicum* L.) under salinity stress** ” submitted by Shivani (CUHP20PLS25) D/o Rameshwar Dutt to the Central University of Himachal Pradesh, Dharamshala in partial fulfilment of the requirements for the award of degree of Master of Science in Plant Sciences has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.

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Prof. Purdeep Kumar

Dean of School of Life Sciences

अधिष्ठाता, जैविक विज्ञान स्कूल
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शाहपुर, कांगड़ा (हि.प्र.)/Shahpur, Kangra (H.P.)-176206

Dr. Parveen Sharma

External Examiner

**Ethnobotanical Study on Noxious Weeds: *Ageratum conyzoides* L. and
Parthenium hysterophorus L. in Tehsil Shahpur of District Kangra of
Himachal Pradesh.**

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial

Fulfillment of the degree of

Masters of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

Prof. Pardeep Kumar

By

Simran

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June, 2022

CENTRAL UNIVERSITY OF HIMACHAL PRADESH




हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
Central University of Himachal Pradesh
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Dharamshala (H.P.) - 176215

CERTIFICATE

Dated: 30/06/22

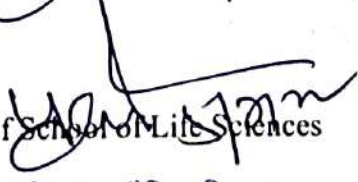
Department of Plant Science (Botany)
School of Life Sciences
Central University of Himachal Pradesh, Dharamshala
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Dharamshala, District Kangra,
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This to certify that the dissertation entitled "**Ethnobotanical Study on Noxious Weeds: *Ageratum conyzoides* L. and *Parthenium hysterophorus* L. in Tehsil Shahpur of District Kangra of Himachal Pradesh**" submitted by **Simran** (CUHP20PLS26) D/O Sh. Mohinder Singh to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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Supervisor


External Examiner
Prof. Parveen Sharma


Head of the Department


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शाहपुर, कांगड़ा (हि.प्र.)/Shahpur, Kangra (H.P.)-176205

**Ethnobotanical Status of *Nasturtium officinale* in
Tehsil Shahpur of District Kangra (H.P.)**

A Dissertation

Submitted to the Central University of Himachal Pradesh for the *Partial*

Fulfillment of the Degree of

Masters of Science in Plant Science (Botany)

In the School of Life Sciences

In the Department of Plant Science (Botany)



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[Established under the Central Universities Act 2009]

Dharamshala, District Kangra,


Himachal Pradesh, India – 176215

This to certify that dissertation entitled “**Ethnobotanical status of *Nasturtium officinales* in Shahpur tehsil of District Kangra (H.P.)**” submitted by **Sushma Kumari (CUHP20PLS27)** D/0 Mr. Sham Lal to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


Prof. Pardeep Kumar
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External Examiner
Prof. Pooresha Sharma


Head of the Department


Dean of School of Life Sciences
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शाहपुर, कांगड़ा (हि.प्र.)/Shahpur, Kangra (H.P.)-176206

**“Seed Priming with Proline Improved the Photosynthetic Pigment
Composition and Growth of Okra (*Abelmoschus esculentus*) under Salinity
Stress.”**

A Dissertation

Submitted to the Central University of Himachal Pradesh for the partial

Fulfilment of the Degree of

Masters of Science in Plant Science

In the school of Life Sciences

In the Department of Plant Science



Under the Supervision of

Dr.Divya V.Nair

By

Swati

(CUHP20PLS28)

June, 2022

CENTRAL UNIVERSITY OF HIMACHAL PRADESH



हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
Central University of Himachal Pradesh
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CERTIFICATE

Dated 29/06/2022

Department/Centre

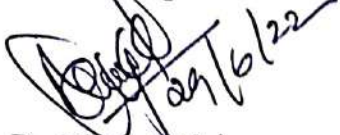
School of Life Sciences

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This to certify that the dissertation entitled "Seed priming with proline improved the photosynthetic pigment composition and growth of okra (*Abelmoschus esculentus*) under salinity stress" submitted by Swati (CUHP20PLS28) D/O Pardeep Kumar to the central university of Himachal Pradesh Dharamshala in partial fulfilment of the requirements for the award of degree of Master of Science in Plant Science in collaboration with external examiner.


29/6/22

Dr. Divya V. Nair

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Prof. Pardeep Kumar

Head of the department


Prof. Pardeep Kumar

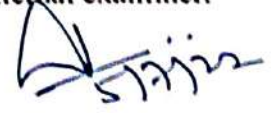
Dean of School of Life Sciences

अधिष्ठाता, जैविक विज्ञान स्कूल
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शाहपुर, कांगड़ा (हि.प्र.)/Shahpur, Kangra (H.P.)-176208



Dr. Arjun Sharma

External Examiner

Synthesis of Zinc Oxide mediated Nanoparticles from Rhizome of *Costus speciosus* (J. Koenig) Sm.

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial
Fulfillment of the degree of

Masters of Science in Plant Science (Botany)

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

Dr. Munish Sharma

By

Swati

(CUHP20PLS29)

CENTRAL UNIVERSITY OF HIMACHAL PRADESH

June, 2022



हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
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Dharamshala, District Kangra,
Himachal Pradesh [India]-176215

This to certify that the dissertation entitled “Synthesis of zinc oxide mediated nanoparticles from rhizome of *Costus speciosus* (J.Koenig) Sm.” Submitted by Swati (CUHP20PLS29) D/O Sh.Prem Singh to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Plant Science (Botany) has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.

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External Examiner
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(Prof. Pardeep Kumar)
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शाहपुर, कांगड़ा जिला/Himachal Pradesh, Kangra (H.P.)-176206

STANDARDIZATION OF BIO-ETHANOL PRODUCTION UNDER DIFFERENT LABORATORY CONDITIONS

A Dissertation

Submitted to the Central University of Himachal Pradesh for the Partial
Fulfillment of the Degree of

Masters of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

Dr. Ashun Chaudhary

By

UDAYPAL

June, 2022

CENTRAL UNIVERSITY OF HIMACHAL PRADESH



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CERTIFICATE

Date: 20/06/2022


Department of Plant Science
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Central University of Himachal Pradesh, Dharamshala
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Dharamshala, District Kangra,
Himachal Pradesh [India] – 176215

This to certify that the dissertation entitled “Standardization of bio-ethanol production under different laboratory conditions” submitted by UDAYPAL (CUHP20PLS30) S/o VINOD KUMAR to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


Dr. Ashut Chaudhary
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Dr. Parveen Sharma
External Examiner


Head of the Department


Dean of School of Life Sciences
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शाहपुर, कांगड़ा (हि.प्र.)/Shahpur, Kangra (H.P.)-176206

"The comparative study of physicochemical parameters and phytoplankton diversity of Dal Lake and Khajjar Lake in Himachal Pradesh"

A dissertation

Submitted to the Central University of Himachal Pradesh for the Partial Fulfillment of the Degree of

Master of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

Dr. Ashu Chaudhary

by

Vikash Mirdha

(Roll No. CUHP20PLS31)

June 2022

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This is to certify that the dissertation entitled “The comparative study of physicochemical parameters and phytoplankton diversity of Dal Lake and Khajjlar Lake in Himachal Pradesh” submitted by Vikash Mirdha (CUHP20PLS31) S/O Suresh Kumar Mirdha to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of the degree of Master of Science in Plant Science has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


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Head of the Department


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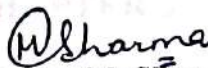
हिमाचल प्रदेश केन्द्रीय विश्वविद्यालय
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Dharamshala (HP) - 176215

CERTIFICATE

Dated: 30/06/2022


Department of Plant Science (Botany)
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[Established under the Central Universities Act 2009]
Dharamshala, District Kangra,
Himachal Pradesh [India]-176215

This to certify that the dissertation entitled "*In vitro* regeneration of *Origanum majorana* L. – an endangered medicinal herb" submitted by Vineeta Kaundal (CUHP20PLS32) D/O Sh. Khem Chand to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Plant Science (Botany) has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.


(Dr. Munish Sharma)

Supervisor

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Temporary Academic Block, Shahpur


External Examiner
Prof. Paveen Sharma


(Prof. Randeep Kumar)
Head of the Department


Dean of School of Life Sciences
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शाहपुर, कांगड़ा (हि.प्र.)/Shahpur, Kangra (H.P.)-176206

Effect of seed priming by mannitol on biochemical and morphological parameters of Capsicum under salinity stress

A Dissertation

Submitted to the Central University of Himachal Pradesh for the Partial Fulfilment of the Degree of

Masters of Science in Plant Science

In the School of Life Sciences

In the Department of Plant Science



Under the Supervision of

Dr. Divya V. Nair

By

WAJID HUSSAIN

JUNE, 2022

CENTRAL UNIVERSITY OF HIMACHAL PRADESH



हिमाचल प्रदेश केंद्रीय विश्वविद्यालय

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(Established under Central Universities Act 2009)

Dharamshala (HP) - 176215

CERTIFICATE

Dated: 30-06-2022

Department of Plant sciences (Botany)

School of Life Sciences

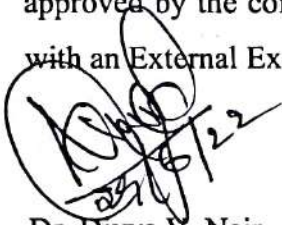
Central University of Himachal Pradesh, Dharamshala

[Established under the Central Universities Act 2009]

Dharamshala, District Kangra,

Himachal Pradesh [India] - 176215

This to certify that the dissertation entitled "Effect of seed priming by mannitol on biochemical and morphological parameters of Capsicum under salinity stress" submitted by Mr. Wajid Hussain (CUHP20PLS33) D/o/ S/o Mr. Khursheed Ahmed to the Central University of Himachal Pradesh, Dharamshala in partial fulfillment of the requirements for the award of degree of Master of Science in Botany has been approved by the committee after an oral examination of the student in collaboration with an External Examiner.



Dr. Divya V. Nair

Supervisor

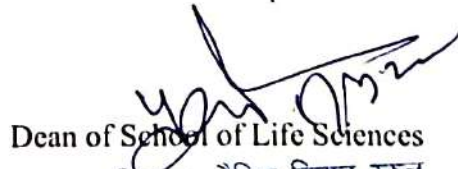
सहायक-प्राध्यापक/Assistant Professor
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Dr. Pooveen Sharma
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Dean, School of Life Science

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