

PROJECT REPORT  
ON  
**Basics of Plant Tissue Culture and Molecular Biology**

Submitted by: **Vaani Arora**  
University Roll No.: - 20107400002

IN PARTIAL FULFILLMENT FOR AWARD OF  
**B. Sc. BIOTECHNOLOGY SEM-IV**

UNDER THE GUIDANCE  
OF  
**Dr. Ashish R. Warghat (Senior Scientist)**

**CSIR - Institute of Himalayan Bioresource Technology, Palampur-176061,  
H.P**



*Handwritten signature*



Submitted to: **Kanya Maha Vidyalaya, Tanda Road, Jalandhar 144004,  
Punjab**



सी.एस.आई.आर-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान  
पो. बॉ. नं. 6 पालमपुर - 176 061 (हि.प्र.) भारत  
CSIR-INSTITUTE OF HIMALAYAN BIORESOURCE TECHNOLOGY  
Post Box No. 6 Palampur (H.P.) 176 061 INDIA



Dr. Gireesh Nadda  
Principal Scientist  
Coordinator, Training Programme  
Email:- training@ihbt.res.in

15<sup>th</sup> July, 2022

TO WHOM IT MAY CONCERN

This is to certify that **Ms. Vaani Arora**, a student of B.Sc. Biotechnology, Kanya Mahavidyalaya, Jalandhar, Punjab undertook her training on the topic entitled "**Basics of Plant Tissue Culture and Molecular Biology**" under the supervision of **Dr. Ashish R. Warghat**, Senior Scientist, Biotechnology Division w.e.f. 17<sup>th</sup> June, 2022 to 15<sup>th</sup> July, 2022 at this Institute.

During the training programme, her conduct was found good.

I wish her all success in her future endeavours.

गिरीश नड्डा 15/07/2022  
(Gireesh Nadda)

# REPORT

ON

Micropropagation and transcript evaluation of an endangered high altitude medicinal herb Nardostachys jatamansi (D. Don)DC. Under in-vitro conditions

Submitted By : Sandeep kaur

University Roll no.- 20107400005

IN PARTIAL FULFILLMENT FOR AWARD OF  
B.SC.BIOTECHNOLOGY SEM-IV

UNDER THE INTELLIGENCE

OF

Dr.Rohit joshi (principal scientist)



CSIR Institute of Himalayan Bioresource Technology

Plamapur-176061, Himachal Pradesh

Submitted To : Kanya Maha Vidyalaya ,Tanda Road

Jalandhar ,144004,Punjab

*Sandeep*



सी.एस.आई.आर-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान  
पो. बॉ. नं. 6 पालमपुर - 176 061 (हि.प्र.) भारत  
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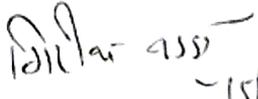
15<sup>th</sup> July, 2022

TO WHOM IT MAY CONCERN

This is to certify that **Ms. Sandeep Kaur**, a student of B.Sc. Biotechnology, Kanya Mahavidyalaya, Jalandhar, Punjab undertook her training on the topic entitled "**Micropropagation and transcript evaluation of an endangered high altitude medicinal herb- *Nardostachys jatamansi* (D.Don) DC. under *in-vitro* conditions**" under the supervision of **Dr. Rohit Joshi**, Senior Scientist, Biotechnology Division w.e.f. 17<sup>th</sup> June, 2022 to 15<sup>th</sup> July, 2022 at this Institute.

During the training programme, her conduct was found good.

I wish her all success in her future endeavours

  
-15/07/2022  
(Gireesh Nadda)

## REPORT

**Analysis of Transcript Abundance in *in-vitro* Micropropagated Plants of an Endangered Medicinal Herb of Alpine Himalayas: *Nardostachys jatamansi* (D. DON) DC**



**CSIR-Institute of Himalayan Bioresource Technology (CSIR-IHBT)  
Palampur**

**Submitted to:**

Department of Bio-Technology  
KMV, Jalandhar

**Submitted by:**

keshiha

B.Sc. Bio-technology SEM 4

Uni roll no. 20107400006

**Under Guidance of –**

**Dr. Rohit Joshi**

**Principal Scientist**

*Nargis*

1886



CSIR-IHBT

सी.एस.आई.आर-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान

पो. बॉ. नं. 6 पालमपुर - 176 061 (हि.प्र.) भारत

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Dr. Gireesh Nadda  
Principal Scientist  
Coordinator, Training Programme  
Email:- training@ihbt.res.in

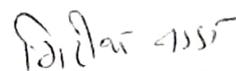
15<sup>th</sup> July, 2022

TO WHOM IT MAY CONCERN

This is to certify that **Ms. Keshiha**, a student of B Sc Biotechnology, Kanya Mahavidyalaya, Jalandhar, Punjab undertook her training on the topic entitled "**Analysis of transcript abundance in *in-vitro* micropropagated plants of an endangered medicinal herb of alpine Himalayas: *Nardostachys jatamansi* (D.Don) DC.**" under the supervision of **Dr. Rohit Joshi**, Senior Scientist, Biotechnology Division w e f. 17<sup>th</sup> June, 2022 to 15<sup>th</sup> July, 2022 at this Institute.

During the training programme, her conduct was found good

I wish her all success in her future endeavours

  
(Gireesh Nadda) 15/07/2022

इ-मेल/E-mail : director@ihbt.res.in  
वेबसाइट/Website : http://www.ihbt.res.in

ई.पी.ए.बी.एक्स/EPABX : 91-1894-230742-43,233338-39  
फैक्स/Fax : 91-1894-230433

Training Certificate

Report on  
Verka milk plant( Jalandhar)

Session – 2021- 2022



Submitted by :.

Name – Muskan Sangotra.

Class – BSC Biotech.sem

Roll no. - 213605

Semester - 4

Submitted to:

Department. Of

Biotechnology

*Nangal*

GSTIN: 03AAAAT0979M1Z5  
SECRET No. 33032618 Dt. 02-02-23  
IRN No. 03401018527

D.M.U./Admn/4889

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Phulo Phalo. Pure Khao Piyo.



Dated... 23/7/2022

### TRAINING CERTIFICATE

This is to certify that Ms. Muskan Sangotra, Roll. No. 213605 student of B.Sc. (Biotechnology) 4<sup>th</sup> Semester of Kanya Maha Vidyalaya College has completed her training from 20.06.2022 to 17.07.2022 in Milk Plant, Jalandhar. During the said period she has completed her training in different sections in respect of her degree and shown keen interest in obtaining the knowledge. During the course of training the work and conduct of the trainee found satisfactory.

  
In-charge Admn

AN ISO 9001-2015  
IS : 15000  
HACCP  
CERTIFIED UNIT

**THE DOABA COOPERTIVE MILK PRODUCERS' UNION LIMITED**  
Milk Plant, G.T. Road, Bye-Pass, Jalandhar-144008 (Pb.) INDIA  
Ph. 0181-2603151 (M) 73555-97021, 73556-01750  
Email: doabamilk\_jal@yahoo.co.in  
[www.verka.coop](http://www.verka.coop)

Project report on  
**Basics of plant tissue culture and molecular biology**

Submitted by- **Roshni**

University Roll No: (20107400001)

In partial fulfilment for the degree of

**Bachelors of science in  
BIOTECHNOLOGY**

Under the guidance of

**Dr. Ashish R. Warghat**  
(Senior scientist)

BIOTECHNOLOGY

**CSIR-INSTITUTE OF HIMALAYAN BIORESOURCES TECHNOLOGY  
PALAMPUR 176061 (H.P.)**



SUBMITTED TO

CSIR- Institute of Himalayan Bioresource Technology, Kanya Maha Vidyalaya (KMV)  
Palampur Jalandhar

*Nargud*



सी.एस.आई.आर-हिमालय जैवसंपदा प्रौद्योगिकी संस्थान  
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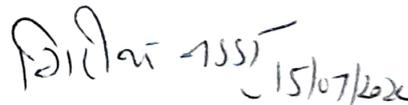
15<sup>th</sup> July, 2022

TO WHOM IT MAY CONCERN

This is to certify that **Ms. Roshni**, a student of B.Sc. Biotechnology, Kanya Mahavidyalaya, Jalandhar, Punjab undertook her training on the topic entitled "**Basics of Plant Tissue Culture and Molecular Biology**" under the supervision of **Dr. Ashish R. Warghat**, Senior Scientist, Biotechnology Division w.e.f. 17<sup>th</sup> June, 2022 to 15<sup>th</sup> July, 2022 at this Institute.

During the training programme, her conduct was found good.

I wish her all success in her future endeavours.

  
(Gireesh Nadda)

Date:- 24/01/2023

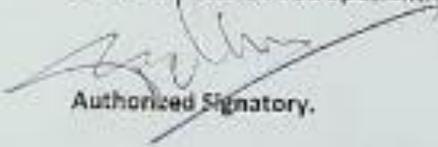
## To Whom It May Concern

This is to certify that Ms. Rashmi D/o Sh. Sushil Kumar R/o VPO Bhadsali, Ward No.1, Tehsil & Distt. Una (H.P) Student of Bachelor of Science In Bio-Technology from Kanya Maha Vidyalaya (Autonomous) Jalandhar (PB) has undergone practical training in Quality Assurance Department from 02/01/2023 to 20/01/2023.

During this period her work & conduct found satisfactory.

We wish her all the success in her future career.

For Mrs. Bectors Food Specialities Ltd.

  
Authorized Signatory.

**Mrs. Bectors Food Specialities Ltd.**

Corporate Office : 8th Floor, Yatika Tower, Sector 54, Golf Course Road, Gurgaon-122003, India P: (+91-124) 4096 300  
Regd Office : Thaing Road, Phillaur-144410, Punjab, India P: (+91-1826) 225418, 222826, 223138 F: (+91-1826) 222915  
Works & Postal Address : Plot No. 13, Industrial Area 1 & 2, Tehliwal, Distt. UNA - 174303 Himachal Pradesh, India P: (+91-1975) 257194  
CIN : U74899PB1995PLC033417 E: biscuit@cremica.in