



SAHODARAN AYYAPPAN SMARAKA SNDP YOGAM COLLEGE, KONNI

PATHANAMTHITTA, KERALA, PIN- 689691

Affiliated to Mahatma Gandhi University, Kottayam. NAAC Accredited with B+ Grade

Website: www.sascollegekonni.in | Email: sassndpyogamcollegekonni@gmail.com

MASTER OF SCIENCE IN BIOTECHNOLOGY

Roll No.	Reg. No.	Name	Project Title/ Topic
1	190011012215	AJMIYA MOL PA	DIVERSITY IN BACTERIAL BIOSURFACTANT PRODUCTION
2	190011012216	AMALA MS	GREEN SYNTHESIS OF ZINCOXIDE NANOPARTICLES BY LEUCAENA AND VARIOUS APPLICATIONS
3	190011012217	ANJU SHAJI	PHYTOCHEMICAL ANALYSIS AND BIOINFORMATIC APPROACH FOR THE EVALUATION OF ANTIVIRAL PROPERTY OF MARINE BROWN ALGA DICTYOTA DICHOTOMA
4	190011012218	ARYALEKSHMI P	ANTIMYCOTIC, BIOCHEMICAL AND MORPHOLOGICAL CHARACTERIZATION AND IN VITRO PROPAGATION STUDIES OF SELECTED RELEASED VARIETIES OF SMALL CARDAMOM
5	190011012219	ASWATHY SASI	ISOLATION AND SCREENING OF PECTINASE AND PROTEASE PRODUCING MARINE BACTERIA FROM MARINE SEDIMENTS AND IDENTIFICATION OF PECTINASE PRODUCING BACTERIAL STRAIN BACILLUS CEREUS
6	190011012220	ATHIRA KS	ISOLATION AND SCREENING OF PECTINASE AND PROTEASE PRODUCING MARINE BACTERIA FROM MARINE SEDIMENTS AND IDENTIFICATION OF PECTINASE PRODUCING BACTERIAL STRAIN BACILLUS SP
7	190011012221	FATHIMA SHAJAHAN	MORPHOLOGICAL AND BIOCHEMICAL CHARACTERIZATION AND ANTIFUNGAL ACTIVITY OF BLACK PPPER
8	190011012222	GREESHMA PH	MOLECULAR PHYLOGENY OF SOME ODNATES IN VELLAYANI,TRIVANDRUM, KERALA
9	190011012223	KRISHNA PRIYA S	BIOCHEMICAL AND NUTRITIONAL FACTORS ASSOCIATED WITH INCIDENCE OF SHOOT/PANCICLE/CAPSULE BORER, CONOGETHES SP.(LEPIDOPTERA CRAMBIDAE) IN SMALL CARDAMOM
10	190011012224	MANEESHA RAJAN	A STUDY ON THE IDENTIFICATIONOF SELECTED SMALL CARDAMOM LANDRACES BASED ON THE MORPHOLOGICAL, BIOCHEMICAL, MOLECULAR CHARACTERS AND ANTIMICROBIAL ACTIVITIES



SAHODARAN AYYAPPAN SMARAKA SNDP YOGAM COLLEGE, KONNI

PATHANAMTHITTA, KERALA, PIN- 689691

Affiliated to Mahatma Gandhi University, Kottayam. NAAC Accredited with B+ Grade

Website: www.sascollegekonni.in | Email: sassndpyogamcollegekonni@gmail.com

Roll No.	Reg. No.	Name	Project Title/ Topic
11	190011012225	MEGHA P	ISOLATION, IDENTIFICATION AND EVALUTION OF FUNGAL BIOCONTROL AGENT TRICHODERMA ISOLATES COLLECTED FROM CARDAMOM RHIZOSPHERE SOIL AND MODE OF ACTION OF TRICHODERMA ON ORGANIC SOLID WASTE MANAGEMENT
12	190011012226	NISHA NARAYANAN	MOLECULAR ANALYSIS IN BACOPA MONNIERI FROM ALAPPUZHA AND TRIVANDRUM
13	190011012227	SANA S HUSSAIN	ENUMERATION MICOFLORA WITH SPECIAL REFERENCE TO TOXIGENIC ASPERGILLUS FLAVUS ABD THEIR CONTROL IN CARDAMOM SAMPLES COLLECTED FROM THREE DISTRICTS IN KERALA
14	190011012228	SONA S SHAJAHAN	GREEN SYNTHESIS OFSILVER AND COPPER NANOPARTICLES FROM BACCAUREA COURTALLENSIS LEAF EXTRACT AND ANALYSIS FOR THEIR ANTIMICROBIAL PROPERTIES
15	190011012230	SUMAYYA NAZAR	PHOSPHATASE PRODUCTION FROM CUPRIAVIDUSMETALLIDURANS AU2
16	190011012231	THASLEEMA N	PRODUCTION OF BIOETHANOL FROM VEGETABLE WASTE AND ITS OPTIMIZATION



Phone : 0468-2244900 (O)

Sahodaran Ayyappan Smaraka

S.N.D.P. Yogam College, Konni

POST BOX NO.16, KONNI, PATHANAMTHITTA, PIN : 689691

(An Aided College affiliated to M.G. University, Kottayam)

Post Graduate Department of Biotechnology


Date : 26-08-2021

Dr INDU C NAIR


Assistant Professor and Head, Department of Biotechnology

CERTIFICATE

Certified that the dissertation entitled "**DIVERSITY IN BACTERIAL BIOSURFACTANT PRODUCTION**" is an authentic record of three months research work done by Miss. **AJMIYA MOL P A**, (Reg. no: 190011012215) under my supervision and guidance at Department of Biotechnology, **SAS SNDP Yogam College Konni**, in partial fulfillment of the requirement for the award of degree of Master Science in Biotechnology. This dissertation has not formed the basis of award of any degree of diploma earlier.


Dr INDU C NAIR




PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA



Phone : 0468-2244900 (O)

Sahodaran Ayyappan Smaraka
S.N.D.P. Yogam College, Konni

POST BOX NO.16, KONNI, PATHANAMTHITTA, PIN : 689591

(An Aided College affiliated to M.G. University, Kottayam)

Post Graduate Department of Biotechnology


Date 26/08/2021

Dr. Indu C Nair



Assistant Professor and Head

CERTIFICATE


Certified that the dissertation entitled "GREEN SYNTHESIS OF ZINC OXIDE NANOPARTICLES BY LEUCAENA LEUCOCEPHALA AND VARIOUS APPLICATIONS" is an authentic record of research work done by AMALA.M.S, (Reg. no: 190011012216) under the supervision and guidance of Dr. Prabhakumari.C, Deputy Principal Scientist Department of Biotechnology CEPCL, Laboratory & Research Institute, Kollam, in partial fulfillment of the requirement for the award of degree of Master Science in Biotechnology. This dissertation has not formed the basis of award of any degree or diploma earlier.


Dr. Indu C Nair

Examiners:-

- 1) 
- 2) 




PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA



Phone : 0468-2244900 (O)

Sahodaran Ayyappan Smaraka

S.N.D.P. Yogam College, Konni

POST BOX NO.16, KONNI, PATHANAMTHITTA, PIN : 689691

(An Aided College affiliated to M.G. University, Kottayam)

Post Graduate Department of Biotechnology

Date : 26.05.2021

Dr. NISHA RAJ S

Assistant Professor, Department of Biotechnology

CERTIFICATE

This is to certify that the dissertation "PHYTOCHEMICAL ANALYSIS AND BIOINFORMATIC APPROACH FOR THE EVALUATION OF ANTIVIRAL PROPERTY OF MARINE BROWN ALGA *DICTYOTA DICHOTOMA*" is an authentic record of work carried out by) Ms. Anju Shaji (Reg No.190011012217) in the partial fulfillment of Master of Science in Biotechnology of Mahatma Gandhi University, Kerala under my supervision and guidance.

Dr. NISHA RAJ S

PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA





भारतीय स्वादुसस बोर्ड
भारत

Indian Cardamom Research Institute SPICES BOARD

(Government of India)
(Ministry of Commerce and Industry)
Myladumpara
Kailasanadu P.O.
Idukki District - 685 553
Kerala

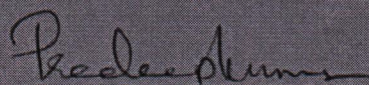
भारतीय इलायची अनुसंधान संस्थान स्पाइसेस बोर्ड

(वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार)
मैलाडुपारा
कैलासनाड पी.ओ.
इडुक्की जिला - 685 553
केरल

CERTIFICATE

This is to certify that **Ms. ARYA LEKSHMI P**, M.Sc. Biotechnology final year student, SAHODARAN AYYAPPAN SMARAKA SNDP YOGAM College, Konni, Pathanamthitta, Kerala has carried out her project work entitled "**ANTIMYCOTIC, BIOCHEMICAL & MORPHOLOGICAL CHARACTERIZATION AND *IN VITRO* PROPAGATION STUDIES OF SELECTED RELEASED VARIETIES OF SMALL CARDAMOM (*Elettaria cardamomum* (L.) Maton)**" to be submitted for partial fulfillment of the requirement of award of **MASTER OF SCIENCE IN BIOTECHNOLOGY** to the Mahatma Gandhi University, Kottayam, Kerala. This is an authentic record of the work carried out by her under my guidance and supervision in Crop Improvement Division, Indian Cardamom Research Institute (Spices Board, Ministry of Commerce and Industry, Govt. of India), Myladumpara, Idukki, Kerala, during the period of April – June 2021. This work has not been submitted for the award of any other Degree or Diploma in any University.

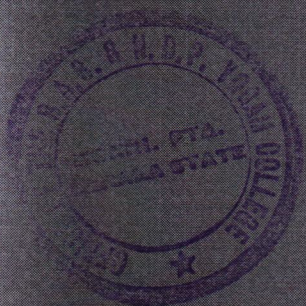
Myladumpara
12.07.2021


Dr. K. PRADIP KUMAR

Head, Crop Improvement Division



स्पाइसेस बोर्ड / SPICES BOARD
• भारतीय इलायची अनुसंधान संस्थान
INDIAN CARDAMOM RESEARCH INSTITUTE
वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार
MINISTRY OF COMMERCE, GOVT. OF INDIA
कैलासनाड, पि.ओ., मैलाडुपारा, इडुक्की जिला - 685553
KAILASANADU P.O., MYLADUMPARA, IDUKKI DT-685553





PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA

Phone : 0468-2244900 (O)

Sahodaran Ayyappan Smaraka

S.N.D.P. Yogam College, Konni

POST BOX NO.16, KONNI, PATHANAMTHITTA, PIN : 689691

(An Aided College affiliated to M.G. University, Kottayam)

Post Graduate Department of Biotechnology

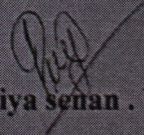
Date : 26-08-2021


Dr. Priya senan .V

Assistant Professor

CERTIFICATE

Certified that the dissertation entitled "ISOLATION AND SCREENING OF PECTINASE AND PROTEASE PRODUCING MARINE BACTERIA FROM MARINE SEDIMENTS AND IDENTIFICATION OF PECTINASE PRODUCING BACTERIAL STRAIN *BACILLUS CEREUS*" is an authentic record of research work done by ASWATHY SASI, (Reg. no: 190011012219) under the supervision and guidance of Dr. PRIYA SENAN .V, Assistant professor, SAS SNDP Yogam College Konni, in partial fulfillment of the requirement for the award of degree of Master Science in Biotechnology. This dissertation has not formed the basis of award of any degree of diploma earlier.


Dr . Priya senan . V


PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA



Phone : 0468-2244900 (O)

Sahodaran Ayyappan Smaraka

S.N.D.P. Yogam College, Konni

POST BOX NO.16, KONNI, PATHANAMTHITTA, PIN : 689691

(An Aided College affiliated to M.G. University, Kottayam)

Post Graduate Department of Biotechnology

Date : 26/08/2021

Dr. PRIYA SENAN. V

Assistant professor,

PG Department of Biotechnology

CERTIFICATE

Certified that the dissertation entitled **ISOLATION AND SCREENING OF UREASE AND AMYLASE PRODUCING MARINE BACTERIA FROM MARINE SEDIMENTS AND IDENTIFICATION OF UREASE PRODUCING BACTERIAL STRAIN *BACILLUS SP*** is an authentic record of research work done by Miss. **ATHIRA K.S**, under my supervision and guidance at Department of Biotechnology, SAS SNDP Yogam College, Konni, in partial fulfilment of the requirement for the award of the degree of Master of Science in Biotechnology. This dissertation has not formed the basis for the award of any degree or diploma earlier.



Dr. PRIYA SENAN. V



PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA



**Indian Cardamom Research Institute
SPICES BOARD**

(Government of India)
(Ministry of Commerce and Industry)
Myladumpara
Kailasanadu P.O
Idukki District - 685 553
Kerala

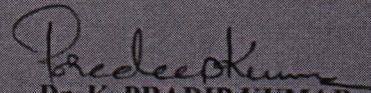
**भारतीय इलायची अनुसंधान संस्थान
स्पाइसेस बोर्ड**

(वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार)
मैलादुम्पारा
कैलासनाड पी.ओ.
इडुक्की जिला - 685 553
केरल

CERTIFICATE

This is to certify that **Ms. FATHIMA SHAJAHAN**, M.Sc. Biotechnology final year student, SAHODARAN AYYAPPAN SMARAKA SNDP YOGAM College, Konni, Pathanamthitta, Kerala has carried out her project work entitled "**MORPHOLOGICAL AND BIOCHEMICAL CHARACTERIZATION & ANTIFUNGAL ACTIVITY OF BLACK PEPPER (*Piper nigrum* L.)**" to be submitted for partial fulfillment of the requirement of award of **MASTER OF SCIENCE IN BIOTECHNOLOGY** to the **Mahatma Gandhi University, Kottayam, Kerala**. This is an authentic record of the work carried out by her under my guidance and supervision in Crop Improvement Division, Indian Cardamom Research Institute (Spices Board, Ministry of Commerce and Industry, Govt. of India), Myladumpara, Idukki, Kerala, during the period of April - June 2021. This work has not been submitted for the award of any other Degree or Diploma in any University.


Myladumpara
12.07.2021


Dr. K. PRADIP KUMAR

Head, Crop Improvement Division

स्पाइसेस बोर्ड / SPICES BOARD
भारतीय इलायची अनुसंधान संस्थान
INDIAN CARDAMOM RESEARCH INSTITUTE
वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार
MINISTRY OF COMMERCE, GOVT. OF INDIA
कैलासनाड पी.ओ., मैलादुम्पारा, इडुक्की जिला - 685553
KAILASANADU P.O., MYLADUMPARA, IDUKKI DIST-685553




PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA

Dr. Mary Reena Jacob
Managing Partner

Reg : No:4611/2016
BIOS RESEARCH CENTRE
TC.26/963
Opposite Jins International,
Plamood, Pattom
Thiruvananthapuram 695 004

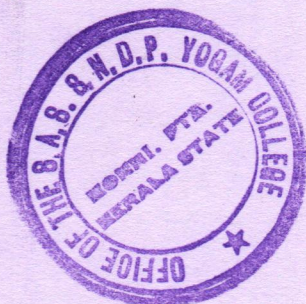
CERTIFICATE

This is to certify that dissertation entitled Phytochemical and “**Molecular Phylogeny of some odonates in Vellayani, Trivandrum, Kerala**” is an authentic work carried out by Miss. Greeshma P H in partial fulfilment of the requirement for the degree of Master of Science and that no part of there has been presented before for the award of any other degree.



A handwritten signature in black ink, appearing to read "Reena", with a horizontal line underneath.

Dr. Mary Reena Jacob

A handwritten signature in green ink, appearing to read "SAS", with a horizontal line underneath.

PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA



**Indian Cardamom Research Institute
SPICES BOARD**

(Government of India)
(Ministry of Commerce and Industry)

Myladumpara
Kailasanadu P.O.
Idukki District - 685 553
Kerala

**भारतीय इलायची अनुसंधान संस्थान
स्पाइसेस बोर्ड**


(वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार)

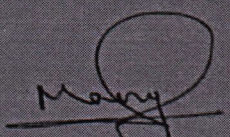
मैलाडुम्पारा
कैलासनाड पो.ओ.
इडुक्की जिला - 685 553
केरल

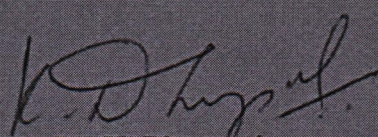
01.07.2021

CERTIFICATE

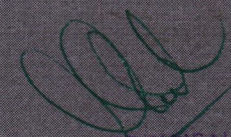
This is to certify that the dissertation entitled "Biochemical and nutritional factors associated with incidence of shoot/panicle/capsule borer, *Conogethes* sp. (Lepidoptera : Crambidae) in small cardamom submitted by Ms. Krishna Priya S, Department of Biotechnology, Sahodaran Ayyappan Smaraka S.N.D.P Yogam College, Sahodaragiri, Cherimukku, Konni P.O., Pathanamthitta, Kerala is the outcome of a bonafide research work carried out at this institute as the partial fulfillment of requirements for the award of the degree of Master of Science in Biotechnology to the Mahatma Gandhi University, Kottayam, Kerala under the guidance and supervision of Dr. Thiyagarajan P., Division of Crop Protection. This part of the dissertation has not been submitted for the award of any degree in any other University.


Dr. Thiyagarajan P.,
Scientist - C (Entomology)
ICRI, Myladumpara


Dr. Manoj Oommen
Scientist - C (Agronomy & Soil Science)
ICRI, Myladumpara


Dr. K. Dhanapal
Head (Crop Protection)
ICRI, Myladumpara




PRINCIPAL
SAS SNOP YOGAM COLLEGE
KONNI, PATHANAMTHITTA



Indian Cardamom Research Institute

SPICES BOARD

(Government of India)
(Ministry of Commerce and Industry)

Myladumpara

Kallasanadu P.O

Idukki District - 685 553

Kerala

भारतीय इलायची अनुसंधान संस्थान

स्पाइसेस बोर्ड

(वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार)

मैलाडुम्पारा

कैलासानाद पी.ओ.

इडुक्की जिला - 685 553

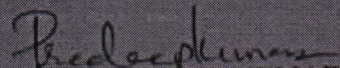
केरल

CERTIFICATE

This is to certify that Ms. MANEESHA RAJAN, M.Sc. Biotechnology final year student, SAHODARAN AYYAPPAN SMARAKA SNDP YOGAM College, Konni, Pathanamthitta, Kerala has carried out her project work entitled "A STUDY ON THE IDENTIFICATION OF SELECTED SMALL CARDAMOM (*Elettaria cardamomum* (L.) Maton) LANDRACES BASED ON THE MORPHOLOGICAL, BIOCHEMICAL, MOLECULAR CHARACTERS & ANTIMICROBIAL ACTIVITIES" to be submitted for partial fulfilment of the requirement of award of MASTER OF SCIENCE IN BIOTECHNOLOGY to the Mahatma Gandhi University, Kottayam, Kerala. This is an authentic record of the work carried out by her under my guidance and supervision in Crop Improvement Division, Indian Cardamom Research Institute (Spices Board, Ministry of Commerce and Industry, Govt. of India), Myladumpara, Idukki, Kerala, during the period of April - June 2021. This work has not been submitted for the award of any other Degree or Diploma in any University.

Myladumpara
12.07.2021




Dr. K. PRADIP KUMAR

Head, Crop Improvement Division

स्पाइसेस बोर्ड / SPICES BOARD

भारतीय इलायची अनुसंधान संस्थान

INDIAN CARDAMOM RESEARCH INSTITUTE

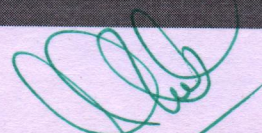
वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार

MINISTRY OF COMMERCE, GOVT. OF INDIA

कैलासानाद पी.ओ., मैलाडुम्पारा, इडुक्की जिला - 685553

KALLASANADU P.O., MYLADUMPARA, IDUKKI DIST - 685553





PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA



**Indian Cardamom Research Institute
SPICES BOARD**

(Government of India)
(Ministry of Commerce and Industry)
Myladumpara
Kailasanadu P.O
Idukki District - 685 553
Kerala

**भारतीय इलायची अनुसंधान संस्थान
स्पाइसेस बोर्ड**

(वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार)
मैलादुपारा
कैलासनाड पी.ओ.
इडुक्की जिला - 685 553
केरल

CERTIFICATE

This is to certify that the Dissertation entitled "ISOLATION, IDENTIFICATION AND EVALUATION OF FUNGAL BIOCONTROL AGENT *TRICHODERMA* ISOLATES COLLECTED FROM CARDAMOM RHIZOSPHERE SOIL AND MODE OF ACTION OF *TRICHODERMA* ON ORGANIC SOLID WASTE MANAGEMENT" an authentic record of original research done by Ms. MEGHA P., Department of Biotechnology, SAHODARAN AYYAPPAN SMARAKA SNDP YOGAM College, Konni, Pathanamthitta, Kerala, is the outcome of a bonafide research work carried out at this institute from April to June 2021 as the partial fulfilment of requirements for the award of the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY affiliated to Mahatma Gandhi University, Kottayam, Kerala under the supervision and guidance of Dr. K. Dhanapal, Scientist-D and Head of the Department (Crop Protection) Indian Cardamom Research Institute (Spices Board, Govt. of India), Myladumpara, Idukki, Kerala. The dissertation has not formed the basis for the award of any Degree/ Diploma/ Associateship/ Fellowship or other similar title to any candidate in any university.

Dr. K. Dhanapal
Scientist D & Head of Department
(Crop Protection)

Place: Myladumpara

Date: 21-9-2021



Dr. Mary Reena Jacob
Managing Partner

Reg : No:4611/2016

BIOS RESEARCH CENTRE

TC.26/963

Opposite Jins International,
Plamood, Pattom
Thiruvananthapuram 695 004

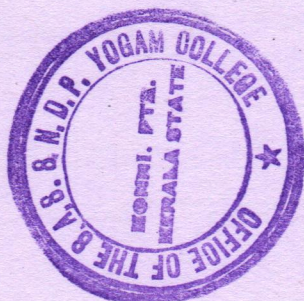
CERTIFICATE

This is to certify that dissertation entitled Phytochemical and “**Molecular Analysis in Bacopa monnieri (L) from Alappuzha and Trivandrum**” is an authentic work carried out by Miss. Nisha Narayanan in partial fulfilment of the requirement for the degree of Master of Science and that no part of there has been presented before for the award of any other degree.



A handwritten signature in black ink, appearing to read "Reena".

Dr. Mary Reena Jacob

A handwritten signature in green ink, appearing to read "SAS".

PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA



Indian Cardamom Research Institute

SPICES BOARD

(Government of India)
(Ministry of Commerce and Industry)

Myladumpara

Kailasanadu P.O

Idukki District - 685 553

Kerala

**भारतीय इलायची अनुसंधान संस्थान
स्पाइसेस बोर्ड**

(वाणिज्य एवं उद्योग मंत्रालय, भारत सरकार)

मैलाडुंपारा

केलासनाड पी.ओ.

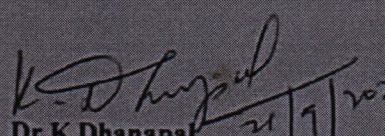
इडुक्की जिला - 685 553

केरल

CERTIFICATE

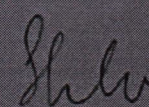
This is to certify that the Dissertation entitled "**ENUMERATION OF MICROFLORA WITH SPECIAL REFERENCE TO TOXIGENIC *Aspergillus flavus* AND THEIR CONTROL IN CARDAMOM SAMPLES COLLECTED FROM THREE DISTRICTS IN KERALA**" an authentic record of original research done by **Ms SANA S HUSSAIN**, Department of Biotechnology, **SAHODARAN AYYAPPAN SMARAKA SNDP YOGAM College**, Konni, Pathanamthitta, Kerala is the outcome of a bonafide research work carried out at this institute from April to June 2021 as the partial fulfilment of requirements for the award of the degree of **MASTER OF SCIENCE IN BIOTECHNOLOGY** affiliated to **Mahatma Gandhi University, Kottayam, Kerala** under the supervision and guidance of **Dr Shadanaika, Scientist-D**, Division of Plant Pathology, Indian Cardamom Research Institute, Spices Board, Govt. of India, Myladumpara, Idukki district, Kerala.

The dissertation has not formed the basis for the award of any Degree/ Diploma/ Associateship/ Fellowship or other similar title to any candidate in any university.



Dr K Dhanapal
Scientist - D & HOD (Crop Protection)

Place: Myladumpara

Date:


Dr Shadanaika
Scientist-D
(Plant Pathology)




PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA



Phone: Office: 04868-237206 & 237207; Fax: 04868-237285
E-mail: icrimyladumpara@gmail.com
Website: www.indianspices.com

Phone : 0468-2244900 (O)



Sahodaran Ayyappan Smaraka
S.N.D.P. Yogam College, Konni

POST BOX NO.16, KONNI, PATHANAMTHITTA, PIN : 689691

(An Aided College affiliated to M.G. University, Kottayam)

Post Graduate Department of Biotechnology

Date : 06-08-2021

CERTIFICATE

Certified that the dissertation entitled "**GREEN SYNTHESIS OF SILVER AND COPPER NANOPARTICLES FROM *BACCAUREA COURTALLENSIS* LEAF EXTRACT AND ANALYSIS FOR THEIR ANTIMICROBIAL PROPERTIES**" is an authentic record of three months research work done by Miss. SONA S SHAJAHAN, (Reg. no: 190011012228) under my supervision and guidance at Department of Biotechnology, SAS SNDP Yogam College Konni, in partial fulfillment of the requirement for the award of degree of Master Science in Biotechnology. This dissertation has not formed the basis of award of any degree of diploma earlier.

Dr .NISHA RAJ .S

Assistant professor

P G Department of Biotechnology

SAS SNDP yogam college, Konni

Pathanamthitta



PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA



Phone 0458-2244980 (O)

Sahodaran Ayyappan Smaraka

S.N.D.P. Yogam College, Konni

POST BOX NO.16, KONNI, PATHANAMTHITTA. PIN 689591

(An Aided College affiliated to M.G. University, Kottayam)

Post Graduate Department of Biotechnology

Dr INDU C NAIR

Date 26.08.2021


Assistant Professor and head, Department of Biotechnology

CERTIFICATE

Certified that the dissertation entitled **"PHOSPHATASE PRODUCTION FROM CUPRIAVIDUS METALLIDURANS AU2"** is an authentic record of three months research work done by Miss. SUMAYYA NAZAR (Reg. no: 190011012230) under my supervision and guidance at Department of Biotechnology, SAS SNDP Yogam College Konni, in partial fulfillment of the requirement for the award of degree of Master Science in Biotechnology. This dissertation has not formed the basis of award of any degree of diploma earlier.


Dr INDU C NAIR




PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA



Phone : 0468-2244900 (O)

Sahodaran Ayyappan Smaraka

S.N.D.P. Yogam College, Konni

POST BOX NO.16, KONNI, PATHANAMTHITTA, PIN : 689691

(An Aided College affiliated to M.G. University, Kottayam)

Post Graduate Department of Biotechnology

Date: 26.08.2021

Dr . Sona A

Assistant Professor

CERTIFICATE

Certified that the dissertation entitled "**PRODUCTION OF BIOETHANOL FROM VEGETABLE WASTE AND ITS OPTIMIZATION**" is an authentic record of three months research work done by **THASLEEMA N**, (Reg. no: 190011012231) under the supervision and guidance of **Dr . Sona A**, Assistant professor, **SAS SNDP Yogam College Konni**, in partial fulfillment of the requirement for the award of degree of Master Science in Biotechnology. This dissertation has not formed the basis of award of any degree of diploma earlier.

Dr . Sona A

Dr. Indu C Nair

Assistant Professor and Head



PRINCIPAL
SAS SNDP YOGAM COLLEGE
KONNI, PATHANAMTHITTA