

SCMS SCHOOL OF TECHNOLOGY AND MANAGEMENT SCMS Campus, Prathap Nagar, Muttom, Aluva, COCHIN-683 106. Kerala

PROJECT WORK BIOTECH



SCMS SCHOOL OF TECHNOLOGY AND MANAGEMENT SCMS Campus, Prathap Nagar, Muttom, Aluva, COCHIN-683 106. Kerala

Department of Biotechnology

Main Project (BO6PRT01)

B.Sc. BOTANY & BIOTECHNOLOGY (DOUBLE CORE) 2019-2022

Student list

SL NO.	Roll No.	Name of the Student	Title of the project
1	B.Sc. Bt 93	Aiswarya D.	Anti-inflammatory comparison of Klenia grandiflora, Vernonia cinerea and Emilia
2	B.Sc. Bt 92	Amrutha Sanil	sonchifolia – invitro and Insilco approach
3	B.Sc. Bt 97	Gowri S.	
4	B.Sc. Bt 83	Lakshmi K. Raghu	Effectiveness of pteridophytes with respect to Salvinia molesta as biofuel – a comparative study
5	B.Sc. Bt 87	Meghasree P. S.	
6	B.Sc. Bt 90	Zainab M. Jabbar	
7	B.Sc. Bt 89	Noufia Nejeev	Molecular mechanism behind the Lead and Zinc tolerance in bacteria isolated from polluted stations of Perivar river
8	B.Sc. Bt 95	Santhy T. S.	
9	B.Sc. Bt 96	Sharannia Raveendran	

Dr. G. SASHI KUMAR PRINCIPAL SCMS SCHOOL OF TECHNOLOGY AND NANAGEMENT

ALUVA 683 106 100H35 SR35 • HO





SCMS SCHOOL OF TECHNOLOGY AND MANAGEMENT SCMS Campus, Prathap Nagar, Muttom, Aluva, COCHIN-683 106. Kerala

M.Sc. Molecular Biology & Genetic Engineering (2020-2022)

Main Project (BS030402) Students List

Roll No.	Name of the Student	Title of the project
MSMB 81	Maria Foustina Mathew	Expression Profiling of starch synthase ii gene involved in starch synthesis of various varieties of Oryza sativa.
MSMB 74	Priyanka . P	A Comprehensive Expression Analysis of the G8.SS gene in Various Varieties of Oryza sativa
MSMB 75	Soja Tom	Vero Cells As a Model System For Cancer Studies: Preliminary Evaluation
MSMB 77	Hasna Shajahan	Molecular characterization and structural analysis of aquaporin (AQP) gene in four Oryza sativa species;
MSMB 78	Alysha Fathma Bijumon	Aquaporin gene expression in various varieties of Oryza sativa L.
MSMB 79	Ashley Zahra Bijumon	Investigation of Anticancer and Apoptosis Inducing Effect of Quercetin on Vero cells In Vitro
MSMB 80	Maria Abraham	In vitro assessment of Anti-Inflammatory Effect of Quercetin on Vero Cells

Dr. G. SASHI KUMAR PRINCIPAL SCNS SCHOOL OF TECHNOLOGY AND IMMAGEMENT



CHNOLO ALUVA 583 105

PROMOTED BY PRATHAP FOUNDATION FOR EDUCATION AND TRAINING Approved by the All India Council for Technical Education & Affiliated to M. G. University

Certificate

SCHOOL OF TECHNOLOGY & MANAGEMENT

This is to certify that the project report entitled "Molecular mechanism behind the Lead and Zinc tolerance in bacteria isolated from polluted stations of Periyar river" is an authentic record of the research work carried out by Noufia Nejeev, Sharannia Raveendran and Shanthy T.S under my supervision in partial fulfillment of the requirements for the B.Sc. degree in Botany and Biotechnology (Dual core) of the Mahatma Gandhi University, Kottayam and further that no part thereof has been presented before for any other degree.

Cochin May 2022



Head of the institution:

Ashered.

Dr. Asha Raj K. R. Assistant Professor Biotechnology Division SSTM, Cochin.



SCMS CAMPUS, PRATHAP NAGAR, MUTTOM, ALUVA, COCHIN - 683 106 ESCMS 2530790 Fax: 91-484-2625006 E-mail: sstm@scmsgroup.org scms@scmsgroup.org Website: www.scmsgroup.org PROMOTED BY PRATHAP FOUNDATION FOR EDUCATION AND TRAINING Approved by the All India Council for Technical Education & Affiliated to M. G. University

SCHOOL OF TECHNOLOGY & MANAGEMENT

Certificate

This is to certify that the project report entitled Effectiveness of Pteridophytes with respect to Salvinia molesta D.S. Mitch. as Biofuel – A comparative Study " is an entite record of the research work carried out by Lakshmi K. Raghu, Meghasree P. S. and Zainab M. Jabbar under my supervision in partial fulfillment of the requirements for be B.Sc. degree in Botany and Biotechnology (Dual core) of the Mahatma Gandhi University, Kottayam and further that no part thereof has been presented before for any other degree.

Cachin March 2022

d of the institution:

Alla

Mrs. Shiny Deepak & Ranjith C. V. Assistant Professors Biotechnology Division SSTM, Cochin.



Almante



CMS SCHOOL OF TECHNOLOGY & MANAGEMENT

PROMOTED BY PRATHAP FOUNDATION FOR EDUCATION AND A PROMOTED BY PROMOTED BY PRATHAP FOUNDATION FOR EDUCATION AND A PROMOTED BY PROMOT

Certificate

This is to certify that the project report entitled "<u>A.M. bifluonaboy</u> <u>Comprisen</u>" is an authentic record of the research work carried out by Aiswarya D, Amrutha Sanil, Gowri S under my supervision in partial fulfillment of the requirements for the B.Sc. degree in Botany and Biotechnology (Dual core) of the Mahatma Gandhi University, Kottayam and further that no part thereof has been presented before for any other degree.

Cochin May 2022 HNOLO Harish M ATTIVA 683 10 Scientist Biotechnology 2° Division CHNOLOG TM. Cochin. 64. ALUVA COCHIN 683 106 Head of the institution: 15 *

SCMS CAMPUS, PRATHAP NAGAR, MUTTOM, ALUVA, COCHIN - 683 166 Phone: 91-484-2625004, 2625005, 2630790 Fax: 91-464-2625006 E-mail: sstm@scmsgroup.org scms@scmsgroup.org Website: www.acmsgroup.org PROMOTED BY PRATHAP FOUNDATION FOR EDUCATION AND TRAINING Accredited by NAAC with 'A' Grade

Approved by the All India Council for Technical Education & Affiliated to M. G. University

CERTIFICATE .

This is to certify that the thesis entitled "Aquaporin gene expression in various varieties of *Oryza sativa L.*" is an authentic record of the research work carried out by Ms. Alysha Fathma Bijumon, under my supervision in partial fulfillment of the requirements for the Master of Science degree in Molecular Biology and Genetic Engineering of the Mahatma Gandhi University, Kottayam and further that no part thereof has been presented before for any other degree.

Cochin

October 2022



DR SETHULEKSHMY NAIR DEPUTY DIRECTOR SCMS INSTITUTE OF BIOSCIENCE AND, BIOTECHNOLOGY RESEARCH & DEVELOPMENT

10/22 Dr.Harish M

SCHOOL OF TECHNOLOGY & MANAGEMENT

Research supervisor

Senior Scientist, Biotechnology division

SSTM, Cochin



SCMS CAMPUS, PRATHAP NAGAR, MUTTOM, ALUVA, COCHIN - 683 106 Phone: 91-484-2625004, 2625005, 2630790 Fax: 91-484-2625006 E-mail: sstm@scmsgroup.org Website: www.scmsgroup.org/sstm



Accredited by NAAC with 'A' Grade Approved by the All India Council for Technical Education & Affiliated to M. G. University

Certificate

This is to certify that the thesis entitled "Investigation of anti cancer and apoptosis inducing effect of quercetin on vero cells in vitro" is an by carried out work research the record of authentic Ms. Ashley Zahra Bijumon, under my supervision in partial fulfilment of the requirements for the Master of Science degree in Molecular Biology and Genetic Engineering of the Mahatma Gandhi University, Kottayam and further that no part thereof has been presented before for any other degree.

CHNOLO

683 10F

+

Cochin October 2022

DR SETHULEKSHMY NAIR DEPUTY DIRECTOR SCMS INSTITUTE OF BIOSCIENCE AND BIOTECHNOLOGY RESEARCH & DEVELOPMENT

Dr. Deepthi D. C

HNOLOG

ALUVA

683 106

35 * L

Assistant professer Biotechnology Division SSTM, Cochin

SCMS CAMPUS, PRATHAP NAGAR, MUTTOM, ALUVA, COCHIN - 683 106 Prone: 91-484-2625004, 2625005, 2630790 Fax: 91-484-2625006 E-mail: sstm@scmsgroup.org Website: www.scmsgroup.org/sstm



Accredited by NAAC with 'A' Grade Approved by the All India Council for Technical Education & Affiliated to M. G. University

Certificate

This is to certify that the thesis entitled "Molecular characterization and structural analysis of aquaporin (AQP) gene in four *Oryza sativa* species; Jyothi, Pokkali, Karanellu and Njavara, native to Kerala" is an authentic record of the research work carried out by Ms. Hasna Shajahan, under my supervision in partial fulfilment of the requirements for the M.Sc. degree in Molecular Biology and Genetic Engineering of the Mahatma Gandhi University, Kottayam and further that no part thereof has been presented before for any other degree.

Cochin

October 2022



110/22

Dr Harish M Research Supervisor Scientist, biotechnology Division SSTM, Cochin



DR SETHULEKSHMY NAIR DEPUTY DIRECTOR SCMS INSTITUTE OF BIOSCIENCE AND BIOTECHNOLOGY RESEARCH & DEVELOPMENT



SCMS CAMPUS, PRATHAP NAGAR, MUTTOM, ALUVA, COCHIN - 683 106 Phone: 91-484-2625004, 2625005, 2630790 Fax: 91-484-2625006 E-mail: sstm@scmsgroup.org Website: www.scmsgroup.org/sstm

SCMS SCHOOL OF TECHNOLOGY & MANAGEMENT PROMOTED BY PRATHAP FOUNDATION FOR EDUCATION AND TRAINING

Accredited by NAAC with 'A' Grade Approved by the All India Council for Technical Education & Affiliated to M. G. University

CERTIFICATE

This is to certify that the thesis entitled "*In vitro* assessment of Anti-inflammatory effect of **quercetin on Vero cells**" is an authentic record of the research work carried out by **Ms. Maria Abraham**, under my supervision in partial fulfilment of the requirements for the Master of Science degree in Molecular Biology And Genetic Engineering of the Mahatma Gandhi University, Kottayam and further that no part thereof has been presented before for any other degree.

Cochin

October 2022

Assistant Professor Biotechnology Division

SSTM, Cochin

Dr. Deepthi D C

DR SETHULEKSHMY NAIR DEPUTY DIRECTOR SCMS INSTITUTE OF BIOSCIENCE AND BIOTECHNOLOGY RESEARCH & DEVELOPMENT





SCMS CAMPUS, PRATHAP NAGAR, MUPTOM, ALUVA, COCHIN - 683 106 Phone: 91-484-2625004, 2625005, 2630790 Fax: 91-484-2625006 E-mail: sstm@scmsgroup.org Website: www.scmsgroup.org/sstm

SCMS SCHOOL OF TECHNOLOGY & MANAGEMENT PROMOTED BY PRATHAP FOUNDATION FOR EDUCATION AND TRAINING

Accredited by NAAC with 'A' Grade Approved by the All India Council for Technical Education & Affiliated to M. G. University

CERTIFICATE

This is to certify that the thesis entitled "EXPRESSION PROFILING OF STARCH SYNTHASE II GENE INVOLVED IN STARCH SYNTHESIS OF VARIOUS VARIETIES OF ORYZA SATIVA. L" is a record of the research work carried out by Ms. Maria Foustina Mathew, under my supervision in partial fulfillment of the requirement for the M.Sc. Degree in Molecular Biology and Genetic Engineering of the Mahatma Gandhi University, Kottayam and further that no part there of has been presented before for any other degree.



en

Dr. Anoja Kurian Research Supervisor Assistant Professor, Biotechnology Division SSTM, Cochin

Cochin

October 2022

DR SETHULEKSHMY NAIR DEPUTY DIRECTOR SCMS INSTITUTE OF BIOSCIENCE AND BIOTECHNOLOGY RESEARCH & DEVELOPMENT



SCMS CAMPUS, PRATHAP NAGAR, MUTTOM, ALUVA, COCHIN - 683 106 91-484-2625004, 2625005, 2630790 Fax: 91-484-2625006 E-mail: sstm@scmsgroup.org Website: www.scmsgroup.org/sstm



SCHOOL OF TECHNOLOGY & MANAGEMEN

OUNDATION FOR EDUCATION AND TRAINING

Certificate

This is to certify that the thesis entitled "A Comprehensive Expression Analysis of the *GBSS* gene in Various Varieties of *Oryza sativa L*." is an authentic record of the research work carried out by Ms. Priyanka P. under my supervision in partial fulfilment of the requirements for the M.Sc. degree in Molecular Biology and Genetic Engineering of the Mahatma Gandhi University, Kottayam and further that no part thereof has been presented before for any other degree.

Cochin

Celeber 2022



PROMOTED BY PRATHAP

Dr.Anoja Kurian

Assistant professor, Biotechnology Division

SSTM, Cochin



SCMS CAMPUS, PRATHAP NAGAR, MUTTOM, ALUVA, COCHIN - 683 106 5004, 2625005, 2630790 Fax: 91-484-2625006 E-mail: sstm@scmsgroup.org Website: www.scmsgroup.org/sstm PROMOTED BY PRATHAP FOUNDATION FOR EDUCATION AND TRAINING

SCHOOL OF TECHNOLOGY & MANAGEMENT

Accredited by NAAC with 'A' Grade Approved by the All India Council for Technical Education & Affiliated to M. G. University

Certificate

This is to certify that the thesis entitled "Vero Cells As A Model System For Cancer Studies: Preliminary Evaluation" is an authentic record of the research work carried out by Ms. Soja Tom under my supervision in partial fulfilment of the requirements for the M.Sc. degree in Molecular Biology and Genetic Engineering of the Mahatma Gandhi University, Kottayam and further that no part thereof has been presented before for any other degree.



Dr. Divya UK

Assistant Professor Biotechnology Division SSTM, Cochin

Cochin

October 2022



SCMS CAMPUS, PRATHAP NAGAR, MUTTOM, ALUVA, COCHIN - 683 106 Phone: 91-484-2625004, 2625005, 2630790 Fax: 91-484-2625006 E-mail: sstm@scmsgroup.org Website: www.scmsgroup.org/sstm