

DEPARTMENT OF BIOTECHNOLOGY



**St Berchmans College**  
Founded 1922

**AUTONOMOUS**

College with Potential for Excellence | Reaccredited by NAAC with A Grade

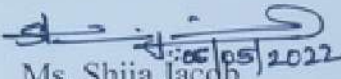
CHANGANASSERY, KERALA

# Certificate

This is to certify that the dissertation entitled “**Extraction of Essential Oil from Orange peel, a waste product from food industry and its comparative study as a natural fragrance component in hand sanitizer over synthetic perfumes**” is an authentic work carried out by **Muhammed Bilal N, (Reg. No.11910614)** and is submitted to St. Berchmans Autonomous College, Changanacherry, in partial fulfilment of the requirements for the degree of Bachelor of Science in Biotechnology and Botany, during the academic year 2019-2022.

Place: Changanacherry

Date: 09.05.22

  
Ms. Shija Jacob  
Teacher in charge



Examiners

1.

  
09/05/2022

2



Mr. Shobin Varghese  
Head of the Department



## Certificate

This is to certify that Ms. Bhavya Jyothish successfully completed dissertation entitled “Study on lipid production from *Chlorella vulgaris*” as prescribed by St. Berchmans College (Autonomous) for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanacherry

Date: 09-05-2022



for Tessmol - P. George

Ms. Tessmol P George

Teacher in charge

Mr. Shobin Varghese

Head of the Department

Examiners

1.   
09/05/2022

2.



## Certificate

This is to certify that Ms. Swathy S successfully completed dissertation entitled “**Studies on changes in ammonia concentration in industrial water upon treatment with *Chlorella vulgaris***” as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanacherry

Date: 09.06.2022

Dr Reshma John

Teacher in charge



Mr Shobin Varghese

Head of the Department

Examiners

1.

2.

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## Certificate

This is to certify that Mr Don Jacob Scaria successfully completed dissertation entitled "*In vitro* shoot proliferation from seedling explants cultures of *Rubia cordifolia* L., a medicinal plant of the Western Ghats" as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanacherry

Date: 09.05.22

Ms Tessmol P George

Teacher in charge

Examiners

1.

2.



Mr Shobin Varghese

Head of the Department

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## Certificate

This is to certify that Mr. Albin John Mathews successfully completed dissertation entitled “**Plant Mediated Synthesis of Silver Nanoparticles using *Lantana camara* Flower Extract and its Antibacterial Activity**” as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanasserry

Date: 09/05/2022

Ms. Sreeja Raj

Teacher in charge

Examiners

1.

2.


Mr. Shobin Varghese

Head of the Department



## Certificate

This is to certify that the dissertation entitled “**Studies on potential of *Moringa oleifera* for nutraceutical product development as antioxidant property enhancer**” is an authentic work carried out by **Anna Jacob, (Reg. No.11910600)** and is submitted to St. Berchmans Autonomous College, Changanacherry, in partial fulfilment of the requirements for the degree of Bachelor of Science in Biotechnology and Botany, during the academic year 2019-2022.

For, Vigimol T Varghese  


Place: Changanassery


Date: 09.09.2022

Mrs. Vigimol.T.Varghese

Internal Guide

Examiners :

1.   
09/09/2022

  
Mr. Shobin Varghese

Head of the Department

2.

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## Certificate

This is to certify that Mr Jithu George successfully completed dissertation entitled “Preliminary studies on *in vitro* propagation of *Curcuma caesia* Roxb., a medicinal plant of the Western Ghats” as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanacherry

Date: 9/05/2022

Ms Sreeja Raj

Teacher in charge



Mr Shobin Varghese

Head of the Department

Examiners

1.   
09/05/2022

2.

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## Certificate

This is to certify that Ms. Elizabeth Antony successfully completed dissertation entitled "**AN IN SILICO STUDIES ON IDENTIFICATION OF POTENT COMPOUNDS FROM *BOERHAVIA DIFFUSA* AGAINST MEMBRANE PROTEIN OF COVID-19**" as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

For, Dr. Manju Antony

Dr. Manju Antony

Teacher in charge

Place: Changanacherry

Date: 09-05-2022

Examiners

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2.



Mr. Shobin Varghese

Head of the Department



## Certificate

This is to certify that Mr. Sijin Mathew successfully completed dissertation entitled "EVALUATION OF ANTI- SARS-COV-2 ACTIVITY AND IDENTIFICATION OF LEAD MOLECULES IN *COFFEA ARABICA*L. THROUGH *IN SILICO* METHOD" as prescribed by St. Berchmans College (Autonomous) for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanacherry

Date:



for, Dr. Manju Antony

Dr. Manju Antony

Teacher in charge

Mr. Shobin Varghese

Head of the Department

Examiners

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2.

2019-2022

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## Certificate

This is to certify that Ms. Siya Soji successfully completed dissertation entitled "COMPARATIVE STUDIES OF GROWTH PATTERN IN THREE DIFFERENT MEDIA AND PHYTOCHEMICAL ANALYSIS OF *Synechocystis salina*" as prescribed by St. Berchmans College (Autonomous) for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanacherry

Date: 09/05/2022

Ms. Sreeja Raj

Teacher in charge



Mr. Shobin Varghese

Head of the Department

Examiners

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### CERTIFICATE

This is to certify that Ms. Vyshnavi V Nair successfully completed dissertation entitled “An *in-silico* molecular docking and virtual screening of therapeutic application of *Pisidium guajava* against diabetic mellitus” as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022,

Place: Changanassery

Date: 09 - 05 - 2022

Mr. Shobin Varghese  
Teacher in Charge



Mr Shobin Varghese  
Head of the Department

Examiners

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09/05/2022

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CHANGANASSERY, KERALA

## Certificate

This is to certify that Ms. Rita Rose Chacko successfully completed dissertation entitled “ **Shoot proliferation of *Acorus calamus*.Linn using liquid-phase *in vitro* culture system**” as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanacherry

Date: 09.05.22

Mr Shobin Varghese

Teacher in charge



Mr Shobin Varghese

Head of the Department

Examiners

1. 9/05/2022

2.

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CHANGANASSERY, KERALA

# Certificate

This is to certify that the dissertation entitled "**Studies on soil secondary nutrients enhancements employing *Arthrospiralina***" is an authentic work carried out by **Ashmi Gigi**, (Reg. No.11910604) and is submitted to St. Berchmans (Autonomous) College, Changanacherry, in partial fulfilment of the requirements for the degree of Bachelor of Science in Biotechnology and Botany, during the academic year 2019-2022.

Place: changanasery

Date : 09/05/2022

Dr.Lijy Jacob  
Teacher in charge

Examiners:



Mr.Shobin Varghese  
Head of the Department

1.

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CHANGANASSERY, KERALA

## Certificate

This is to certify that Ms Amaya Rose Biju successfully completed dissertation entitled "**Extraction , Dementholized crystal preparation and phytochemical analysis of mint leaves**" as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanacherry

Date: 09 - 05 - 2022

Dr Reshma John

Teacher in charge

Examiners

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Mr Shobin Varghese

Head of the Department

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CHANGANASSERY, KERALA

## Certificate

This is to certify that Ms. Vishma K has successfully completed dissertation entitled **“PRODUCTION OF BIOETHANOL FROM BANANA PEEL USING ISOLATED CELLULASE PRODUCERS FROM SOIL”** as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanacherry

Date: 09/05/2022



09/05/2022

Ms. Shija Jacob

Teacher in charge

Examiners

1.



09/05/2022

2.



Mr. Shobin Varghese

Head of the Department

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CHANGANASSERY, KERALA

## Certificate

This is to certify that Ms Annie Chacko successfully completed dissertation entitled “Sequence analysis and sub cellular localization of B-Box zinc finger protein in *Glycine Max*” as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanacherry

Date: 09-05-2022



Dr Lily Jacob

Teacher in charge

Mr Shobin Varghese

Head of the Department

Examiners

1.

2.



## Certificate

This is to certify that Ms Anu Thomas successfully completed dissertation entitled "**Homology modeling of protein structure of photosystem II protein D1 & D2**" as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

To, Vigimol T Varghese

Ms Vigimol T Varghese  
Teacher in charge

Place: Changanacherry

Date: 9-05-2022



Mr Shobin Varghese  
Head of the Department

Examiners

1.   
09/05/2022

2.

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CHANGANASSERY, KERALA

**CERTIFICATE**

This is to certify that Ms. Aparna Santhosh successfully completed dissertation entitled  
"TARGETING SARS CoV2 MEMBRANE PROTEIN OF COVID -19 WITH THE  
PHYTOCHEMICALS FROM SPICES: AN *IN-SILICO* APPROACH" as prescribed by  
St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the  
year 2019-2022,

For, *Vigimol T Varghese*  
*[Signature]*

Place: Changanassery

Date: 09-05-2022

**Mrs Vigimol T Varghese**  
Teacher in Charge

Examiners

1

*[Signature]*  
09/05/2022

2



*[Signature]*

**Mr Shobin Varghese**  
Head of the Department



## Certificate

This is to certify that Ms. Meenu Thomas successfully completed dissertation entitled “Genome wide identification of microsatellite markers in *Phoenix dactylifera* (Date palm)” as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanacherry

Date: 09-05-2022

Dr Reshma John

Teacher in charge



Examiners

1.   
09/05/2022

Mr Shobin Varghese

Head of the Department

2.

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## Certificate

This is to certify that Ms. Leya Mariam Mathew successfully completed dissertation entitled “**Insilico virtual screening of marine seaweed metabolites as JAK1 inhibitors in Thyroid Cancer**” as prescribed by St. Berchmans College for degree of Bachelor of Science in Biotechnology and Botany in the year 2019-2022.

Place: Changanacherry

Date: 9/05/2022



Ms. Tessmol P George

Teacher in charge

Examiners

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2.

Mr. Shobin Varghese

Head of the Department