

#### **CERTIFICATE**

"MEDICINAL PROPERTIES OF THE DIFFERENT SOLVENT EXTRACTS OF THE FRUIT OF Artocarpus hirsutus AGAINST CLINICALLY ISOLATED DIARRHEA CAUSING E.Coli" carried Out by MR AJITH M.R, Reg.No:-160011013023 in the Department of Applied microbiology & Biotechnology, St. Thomas College, Pala, under the guidance of Mr. NOBY MATHEW during the academic year 2016- 2018 towards the partial fulfillment of the requirement for the award of Masters Degree in Biotechnology under Mahatma Gandhi University.

Dr. Fr. James Jhon Mangalam

PRINCIPAL

ST. THOMAS COLLEGE PALAI

03/08/2018



# ST.THOMAS COLLEGE, PALAI UGC Approved college with potential for Excellence

#### **BONAFIDE CERTIFICATE**

This is to certify that the dissertation entitled "Identification and characterization of conserved chromo domain protein in human malarial parasite *P. falciparum*", submitted by Anandhu Suresh (Reg. No.160011013024), in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY is a record of work done in the Division of Tropical Disease Biology Section, Rajiv Gandhi Centre for Biotechnology (RGCB), Trivandrum from 01-04-2018 to 30-06-2018.

Date:

Rev. Dr. James John Mangalathu

Principal

St. Thomas College, Palai



### ST.THOMAS COLLEGE, PALAI

### UGC Approved college with potential for Excellence

#### **BONAFIDE CERTIFICATE**

This is to certify that the dissertation entitled "Microsatellite (SSR) mining and Validation in large cardamom (Amomum subulatum Roxb)", submitted by Binny John (Reg. No.160011013025), in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY is a record of work done in the Division of Biotechnology, Indian Cardamom Research Institute (ICRI), Myladumpara, Idukki from 04-04-2018 to 30-06-2018.

Date: 30/7/2018

Rev. Dr. James John Mangalathu

Principal

St. Thomas college, Palai



### STATHOMAS COLLEGE, PALAI

### **UGC Approved college with potential for Excellence**

#### BONAFIDE CERTIFICATE

This is to certify that the dissertation entitled "ELUCIDATION OF THE ROLE OF EMBLICA OFFICINALIS IN ANTI-TUMORIGENICITY OF CERVICAL CANCER CELL LINE - CaSki", submitted by Ms. NAYANA.B.RADH (Reg. No.160011013026), in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY is a record of work done in the Division of Neurobiology, Disease Biology Section, Rajiv Gandhi Centre for Biotechnology (RGCB), Trivandrum from 04-04-2018 to 30-06-2018.

Mrs. Archana Cherian Prof.James Joseph HEAD, DE Internal Guide Course Coordinator ST. THUM...S COLLEGE Arthoperem r. O. FALA - 500 574.

Department of Biotechnology and Applied microbiology

**External examiners:** 

Dr. Sajerhbeurar N. 16.

2)



### ST. THOMAS COLLEGE, PALAI

UGC Approved college with potential for Excellence

#### **BONAFIDE CERTIFICATE**

This is to certify that the dissertation entitled "Evaluation of the cytotoxic effects of an anticancer principle from Wrightia tinctorial against melanoma cells", submitted by Safa Ashraf (Reg. No.160011013027), in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY is a record of work done in the Division of Cancer Research, Chronic Disease Biology Section, Rajiv Gandhi Centre for Biotechnology (RGCB), Trivandrum.

Date: 06-08-2018



Rev. Dr. James John Mangalathu

Principal

St. Thomas college, Palai



# ST.THOMAS COLLEGE, PALAI

## **UGC Approved college with potential for Excellence**

### BONAFIDE CERTIFICATE

This is to certify that the dissertation entitled "Microsatellite (SSR) mining and validation in small cardamom (Elettaria cardamomum Maton)", submitted by Shymol Varghese (Reg. No.160011013029), in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY is a record of work done in the Division of Biotehnology, Indian Cardamom Research Institute (ICRI), Myladumpara from 04-04-2018 to 30-06-2018.

Prof. Janes Joseph HE Course Coordinator CHNOLOGY APPLIED MICROSIOLOGY ST. THOMAS COLLEGE Arunapuram F. O.

Mrs. Archana Cherian

Internal Guid

PALADepartment of Biotechnology and Applied microbiology

1) Dr. Sajerbleumar. N. C. 55 6/8/18

2)



### ST.THOMAS COLLEGE, PALAI

UGC Approved college with potential for Excellence

#### BONAFIDE CERTIFICATE

This is to certify that the dissertation entitled "ELUCIDATING OF THE ROLE OF CAFFEOYL SHIKIMATE ESTERASE (Cse) GENES IN ZINGIBER – PYTHIUM INTERACTION ", is an authentic record of research work done by Ms SMRUTHY R KRISHNAN, Reg No : 160011013030, under the supervision and guidance of Dr GEORGE THOMAS, Scientist F, Plant Disease Biology and Biotechnology Lab, Rajiv Gandhi Centre For Biotechnology Trivandrum from 04-04-2018 to 30-06-2018, in partial fulfillment of the requirements for the award of the degree of MASTER OF SCIENCE IN BIOTECHNOLOGY. No part of this dissertation has been formed the basis for the award of any Degree / Diploma / Associateship / Fellowship or other similar titles of this or any other University or Society.

ROF. JAMES JOSEPH RESTORED TO SERVICE STREET AND STONE OF AND TO SERVICE STREET AND STONE OF AND

Course Coordinato MES JOSEPH HEAD, DEPT. OF BIOTECHNOLOGY APPLIED MICROBIOLOGY

ST. THOMAS COLLEGE Arunapuram P. O. PALA - 686 574.

Department of Biotechnology and Applied microbiology

**Internal Guide** 

External examiners:

1) Dr. Sajerhkeemar. Dr. Sigs

2)