A STUDY ON ADULTERANTS IN FOOD AND A STUDY ON FISH PRESERVATIVES, AMMONIA AND FORMALIN AND ITS TOXIC EFFECT ON HUMAN HEALTH

A Dissertation submitted to The Calicut University in partial fulfillment of the requirements

[for the award of degree in]

BACHELORS OF SCIENCE IN BIOCHEMISTRY

Submitted by,

AJAY DAS (PZARSBC002)

ANASWARA N P (PZARSBC004)

ANN MARY MATHEW (PZARSBC006)

AISHWARYA THOMAS (PZARSBC016)

MITHUN K RAJAN (PZARSBC029)

Under the guidance of,

Mr. JESSIN GEORGE

(Assistant Professor Department of Biochemistry)





PAZHASSIRAJA COLLEGE

PULPALLY, WAYANAD, KERALA - 673579

(Affiliated to University of Calicut, NAAC accredited with 'B' grade)
Web: www.pazhassirajacollege.ac.in

CERTIFICATE

This is to certify that the dissertation entitled "A STUDY ON ADULTERANTS IN FOOD AND A STUDY ON FISH PRESERVATIVES, AMMONIA AND FORMALIN AND ITS TOXIC EFFECT ON HUMAN HEALTH" is a bonafide work submitted to the University of Calicut in partial fulfillment of the requirement for the award of degree in Bachelor of Science in Biochemistry done by AJAY DAS, ANASWARA N P, ANN MARY MATHEW, AISHWARYA THOMAS, MITHUN K RAJAN of Department of Biochemistry, Pazhassiraja College, Pulpally, during the academic year 2019-2020.

This is an authentic record of the research carried out under the guidance and supervision of MR. JESSIN GEORGE, Assistant Professor, Department of Biochemistry, Pazhassiraja College, Pulpally.

Certified Signature of guide

Dr. JOMET SEBASTIEN

HOD

Department of Biochemistry

Mr.JESSIN GEORGE

Assistant Professor

Department of Biochemistry

Counter Signed

DR. ANIL KUMAR K

Principal

Pazhassiraja College Pulpally, Wayanad

External Examiner:1

PHYTOCHEMICAL SCREENING AND BIOPESTICIDAL ACTIVITY OF *Verbuscumthapsus*LEAF EXTRACT

A Dissertation submitted to The Calicut University in partial fulfillment of the requirements for the award of degree in

BACHELORS OF SCIENCE IN BIOCHEMISTRY

Submitted by,

AJITH ANTONY (PZARSBC018)

AMAYA SABU (PZARSBC019)

ARYA K ANILKUMAR (PZARSBC023)

JASMIN JOHN MOOLAKKATTE(PZARSBC028)

VISHNUPRIYA N M (PZARSBC015)

Under the guidance of,

Mr. JESSIN GEORGE

(Assistant Professor Department of Biochemistry)





PAZHASSIRAJA COLLEGE PULPALLY, WAYANAD, KERALA-673579

(Affiliated to University of Calicut, NAAC accredited with 'B' grade)

Web:www.pazhassirajacollege.ac.in

CERTIFICATE

This is to certify that the dissertation entitled "PHYTOCHEMICAL SCREENING AND BIOPESTICIDAL ACTIVITY OF Verbuscum thapsus LEAF EXTRACT" is a bonafide work submitted to the University of Calicut in partial fulfillment of the requirement for the award of degree in bachelor of Science in Biochemistry done by AJITH ANTONY, AMAYA SABU, ARYA K ANILKUMAR, JASMIN JOHN MOOLAKATTE, VISHNUPRIYA N M of Department of Biochemistry, Pazhassiraja Collage, Pulpally, during the academic year 2019-2020.

This is an authentic record of the research carried out under the guidance and supervision of **Mr. JESSIN GEORGE**, Assistant professor, Department of Biochemistry, Pazhassiraja Collage, Pulpally.

Counter signed by,

Dr. Jomet K Sebastian

Head of the department

Pazhassiraja College
Pulpally, Wayanad

Guide and supervision,

Mr. Jessin George

Assistant professor

Dept. Biochemistry

DR.ANILKUMAR

Principal Pazhassiraja College Pulpally

Internal examiner

External examiner

SOIL PHYSIO-CHEMICAL AND MICROBIAL ANALYSIS IN FLOOD AFFECTED AGRICULTURAL PLAINS OF PERIKKALLOOR VILLAGE

A Dissertation submitted to The Calicut University in partial fulfillment of the requirements for the award of degree in

BACHELORS OF SCIENCE IN BIOCHEMISTRY

Submitted by,

AJAY K. S (PZARSBC017)

ARJUN K(PZARSBC022)

BIBIN RAJ (PZARSBC025)

DIYA RAJAN (PZARSBC026)

NANDANA A.S (PZARSBC030)

Under the guidance of,

Ms. AISWARYA JOSE

(Assistant Professor Department of Biochemistry)





PAZHASSIRAJA COLLEGE

PULPALLY, WAYANAD, KERALA - 673579

(Affiliated to University of Calicut, NAAC accredited with 'B' grade)
Web: www.pazhassirajacollege.ac.in

CERTIFICATE

This is to certify that the dissertation entitled "A STUDY ON SOIL PHYSIO-CHEMICAL AND MICROBIAL ANALYSIS IN FLOOD AFFECTED AGRICULTURAL PLAINS OF PERIKKALLOOR VILLAGE" is a bonafide work submitted to the University of Calicut in partial fulfillment of the requirement for the award of degree in Bachelor of Science in Biochemistry done by AJAY K.S, ARJUN.K, BIBIN RAJ, DIYA K RAJAN, NANDANA A.S, of Department of Biochemistry, Pazhassiraja College, Pulpally, during the academic year 2019-2020.

This is an authentic record of the research carried out under the guidance and supervision of MS. AISWARYA JOSE, Assistant Professor, Department of Biochemistry, Pazhassiraja College, Pulpally.

Counter signed by, Guide and supervision,,

HOD Rume

Dr. JOMET SEBASTIEN

Department of Biochemistry

Dept.of Biochemistry
Pazhassiraja College
Pulpally, Wayanad

MS.AISWARYA JOSE

Assistant Professor

Department of Biochemistry

Dr. Anil Kumar K

Principal

External Examiner 1:

Pazhassiraja College Pulpally, Wayanad

2:

SICKELE CELL DISEASE, SCREENING IN THREE DIFFERENT TRIBAL POPULATIONS IN PULPALLY, WAYANAD

A Dissertation submitted to The Calicut University in partial fulfillment of the requirements for the award of degree in

BACHELORS OF SCIENCE IN BIOCHEMISTRY

Submitted by,

AKSHAYA P P (PZARSBCOO3)

ANJANA K R (PZARSBCO21)

HRIDYA M S (PZARSBCO10)

SANDRA SUNIL (PZARSBC011)

SHINTO JOSEPH (PZARSBCO12)

VAISHNAVI K A (PZARSBCO14)

Under the guidance of,

Dr.JOMET SEBASTIAN.k

(HOD, Department of Biochemistry)





PAZHASSIRAJA COLLAGE, PULPALLY

(Affilitated to University of Calicut)

CERTIFICATE

This is to certify that the dissertation entitled "Scikle Cell Disease, screening in three different tribal populations in Pulpally, Wayanad" is a bonafide work submitted to the University of Calicut in partial fulfillment of the requirement for the award of degree in Bachelor of Science in Biochemistry done by AKSHAYA.P.P(PZARSBC003), ANJANA.K.R(PZARSBC021), HRIDYA.M.S(PZARSBC010)SANDRA.SUNIL(PZARSBC011), SHINTO JOSEPH.(PZARSBC012), VAISHNAVI.K.A(PZARSBC014) of Department of Biochemistry, Pazhassiraja Collage, Pulpally, during the academic year 2019-2020.

This is an authentic record of the research carried out under the guidance and supervision of **DR. JOMET SEBASTIAN,K** HOD, Department of Biochemistry, Pazhassiraja Collage, Pulpally.

Guide and HOD 6-3-2020

(Dr.Jomet Sebastian.K)

Dept.of Biochemistry
Pazhassiraja College
Pulpally, Wayanad

Pricipal

(Dr.Anilkumar.K)

EXTERNAL EXAMINERS:

PRINCIPAL
Pazhassiraja College

Paznassiraja Conege Pulpally P.O, Wayanad-673579

Phytochemical screening and pharmacological activities of different solvent extract of Muehlenbeckia platyclada root

A dissertation submitted for the partial fulfillment of Bachelor of Science in Biochemistry



ANJIMA M (PZARSBC005)
ATHIRA SABU (PZARSBC024)
ATHULYA P S (PZARSBC008)
FATHIMA P S (PZARSBC009)
VISHNU BALAN (PZARSBC032)
Under Guidance of

Dr. JENSON JACOB

Asst. Professor, Department of Biochemistry



PAZHASSIRAJA COLLEGE PULPALLY, WAYANAD, KERALA-673579

(Affiliated to University of Calicut, NAAC accredited with 'B' grade)

CERTIFICATE

This to certify that dissertation entitled" Phytochemical screening and pharmacological activities of different solvent extracts of Muehlenbekia platyclada root submitted is a bonafide work of the dissertation carried out by Ms.Anjima.M, Ms.Athira Sabu, Ms.Athulya P S, Ms Fathima P S and Mr.Vishnu Balan under the guidance of Dr.Jenson Jacob, Department of Biochemistry Pazhassiraja College, Pulpally affiliated to University of Calicut during the academic year 2019-2020.

Counter signed by,

Dr. JOMET K SEBASTIAN

Head of the Department

Dept.of Biochemistry
Pazhassiraja College
Pulpally, Wayanad

(Guide and Supervisor)

DR.JENSON JACOB

Assistant. Professor

Dept. Biochemistry

DR. ANÍL KUMAR K

Principal Pazhassiraja college Pulpally