

Dr. S. G. Sreekanteswara Swamy
Executive Secretary

Ref: 7.1.03/SPP/ 1148

23rd March 2016

The Principal,
Sapthagiri College of Engineering
14/5, Chickasandra,
Hesaraghatta Main Road
Bengaluru - 560 057

Dear Sir,

Sub : Sanction of Student Project - 39th Series: Year 2015-2016
Your Project Proposal Reference No. : **39S_BE_1928**

Ref : Your Project Proposal entitled: **STUDY ON THE CHEMICAL COMPOSITION AND IN-VITRO EVALUATION OF THEIR PHARMACOLOGICAL ACTIVITY**

I am happy to inform that your project proposal referred above, has been approved by the Secretary, KSCST for "Student Project Programme - 39th Series" and has been sanctioned with a budgetary break-up as detailed below:

Student / s	Nethravathi M and others		Budget	Amount (Rs)
Guide/s	Dr Ananda S		Materials/Consumables	5,000.00
			Labor	-
			Travel	-
Department	Biotechnology Engineering		Miscellaneous	500.00
			Report	500.00
			TOTAL	6,000.00
Rupees	SIX	ZERO		
	THOUSAND	HUNDRED		

The following are the guidelines to carryout the project work :

- The project should be performed based on the objectives of the proposal sent by you.
- The project should be completed in all respects and one copy of the hardbound report along with softcopy of the full report (including coverpages, abstract and preliminary pages) and in a CD (.pdf format) should be submitted to KSCST.
- Any change in the project title and objectives, etc., or students is liable to rejection of the project and the amount sanctioned needs to be returned to KSCST.
- Please quote your **project proposal reference number printed above** in all your future correspondences.
- Important:** After completing the project, 2 to 3 page write-up (synopsis) needs to be sent by e-mail [spp@kscst.iisc.ernet.in] and should include following :
 - Title of the project
 - Name of the College & Department
 - Name of the students & Guide(s)
 - Keywords

Principal
Sapthagiri College of Engineering
Chickasandra, Hesaraghatta Road
Bangalore-560 057

Date: 20/05/2016

From,
The HOD,
Department of Biotechnology
Sapthagiri College of Engineering
Bangalore-57

To,
The Principal
Sapthagiri College of Engineering
Bangalore-57

Respected Sir,

Subject: **Requisition for the release of project fund sanctioned by KSCST.**

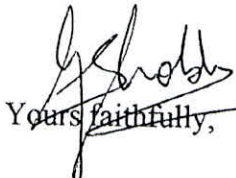
With respect to the above subject, we request you to kindly release the fund in order to complete the objectives of the project accepted by KSCST. We request you to release the fund in the name of the guide mentioned below. Kindly do the needful.

Thanking You,

Guide: Dr. Ananda S / Shobha G

Title: *Laurus nobilis* L. and *Melaleuca quinquenervia* (Cav.) S.T.Blake: Study on the chemical composition and *in-vitro* evaluation of their Pharmacological activity

Amount: Rs 6000/-


Yours faithfully,


Head of the Department
Dept. of Bio Technology
Sapthagiri College of Engineering
No. 57/1, Chikkasandra,
Hesaraghatta Main Road,
Bangalore -57


Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

6000 KSCST
500 Regn fee by SCT
6500

Voucher
G L raised
6,500/- 

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बैंक को / CODE No: 40880
Tel No. 080-28378233

बैंकर्स चेक
BANKERS CHEQUE

Key: VIHCET
Sr. No: 844204

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अधिकृत हस्ताक्षर
AUTHORISED SIGNATORY

शाखा प्रबंधक
BRANCH MANAGER

कम्प्यूटर द्वारा मुद्रित होने पर ही वैध
VALID ONLY IF COMPUTER PRINTED

₹ 50,000/- तक के निमित्त से अधिकतम 30 दिनों के लिए वैध
INSTRUMENTS FOR ₹ 50,000/- & ABOVE ARE NOT VALID UNLESS SIGNED BY TWO OFFICERS

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Principal

Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

20/5/16

UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE

Acknowledgement for Receipt of Cash/Draft/Cheque

No 9005

Office of the Dean (Agri)
College of Agriculture,
UAS, GKVK, Bangalore - 560 065

Dated 22.1.16 19

RECEIVED from ① Ms. Nethravathi, ② Ms. Divya K. H. Rs. 12000/-
Rs. 12000/- Sapthagiri
College of Engg. B'lore. Rs. 24000/-
(Rupees DD No. 560747/11.1.14 Rs. 10,000/- Cash for Rs. 14000/- only)

by Cash/Demand Draft/Cheque No. _____ dated _____
on account of Project to be from 22.1.16 to 31.4.16
(3 months)

CASHIER

NOTE: This receipt is issued subject to realisation of D.D./Cheque.

Dr. Vasundhara
Assistant Controller
Agricultural College,
GKVK, Bangalore-560 065.

Sapthagiri College of Engineering
Chikkasandra, Hesarghatta Road,
Bangalore-560 067

Attested copy
M. Mahesh

28/5/16

Payment Voucher

No. : 724

Through : SBI-30263521464

Dated : 2-Jun-2016

Particulars

Account :

Amount

KSCST (Project Work)

6,500.00

On Account of :

Being amount paid towards expenses towards
KSCST (Project Work)

Bank Transaction Details:

Shobha G

Cheque

651742

2-Jun-2016

6,500.00

Amount (in words) :

INR Six Thousand Five Hundred Only

₹ 6,500.00

Receiver's Signature

8/6/16

Authorised Signatory

Checked by:

03/06



Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road,
Bangalore-560 057

SAPTHAGIRI COLLEGE OF ENGINEERING
DEPARTMENT OF BIOTECHNOLOGY

(Affiliated to Visvesvaraya Technological University, Belgaum, Approved by AICTE, New Delhi)
14/5, Chikkasandra, Hesaraghatta Main Road, Bengaluru-560057



A PROJECT REPORT ON

“Laurus nobilis L. and Melaleuca quinquenervia (Cav.)
S.T.Blake: Study on the Chemical Composition and *In-Vitro*
Evaluation of their Pharmacological Activity”

Report of 39S_BE_1928 submitted to Karnataka State Council for Science and Technology –
Student Project Programme – 39series

Submitted by

NETHRAVATHI. M
DIVYA. K. H

1SG12BT016
1SG12BT009

Internal Guide

Dr ANANDA. S
The HOD,
Department of Biotechnology,
Sapthagiri College of Engineering

External Guide

Dr M. VASUNDHARA
Professor,
Medicinal and Aromatic section,
Department of horticulture;
UAS (B), GKVK

Submitted To



Principal
Sapthagiri College of Engineering
Chikkasandra, Hesaraghatta Road
Bangalore-560057

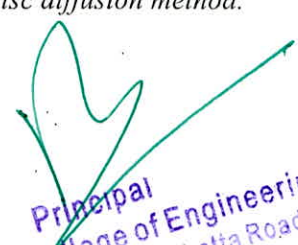
ಕರ್ನಾಟಕ ರಾಜ್ಯ ವಿಜ್ಞಾನ ಮತ್ತು ತಂತ್ರವಿದ್ಯಾ ಮಂಡಳಿ
Karnataka State Council for Science and Technology
Indian Institute of Science Campus, Bengaluru 560 012
2015- 2016

Abstract

Nethravathi. M and Divya. K. H
Department of Biotechnology, Sapthagiri College of Engineering
Email Id: nethram6kan@gmail.com

Essential oils are the highly concentrated volatile oils which are extracted from flowers, leaves, bark, stem, roots and seeds of aromatic plants. These oils are known to possess antimicrobial, antioxidant, anti-diabetic, anti-helminthic and anti-inflammatory potential. In the present work, two major aromatic trees were considered namely, *Laurus nobilis* L. and *Melaleuca quinquenervia* (Cav.) S.T.Blake. The essential oils extracted through hydro-distillation were assessed for the quality through Physico-Chemical parameters and chemical composition was evaluated through Gas Chromatography-Mass Spectrometry. The extracted essential oils were tested for their Antimicrobial potentiality against pathogenic strain by Disc diffusion method and for their Antioxidant potentiality through various *in-vitro* assays. The results revealed that both *Laurus nobilis* L. and *Melaleuca quinquenervia* (Cav.) S.T.Blake essential oils displayed antimicrobial activity against disease causing microorganism such as *Escherichia coli* and *Staphylococcus aureus*. Also, the results revealed that both the plants essential oils are promising alternatives to the synthetic antioxidants that are in use currently in the food industries.

Keywords: Volatile oil, Antimicrobial, Antioxidant, disc diffusion method.



Principal
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