A.V.V.M. Sri Pushpam College (Autonomous)
Poondi– 613 503, Thanjavur-Dt, Tamilnadu
(Affiliated to Bharathidasan University, Tiruchirappalli – 620 024)

3.7.1 Number of Collaborative activities per year for research/ faculty exchange/ student exchange/ internship/ on –the-job training/ project work

Collaborating Agency:

Dr. P. Muruganantham Associate Professor Dept. of Botany

Jamal Mohammed College, Tiruchirapalli

Dr. C. CHANDRAN
Associate Professor
PG &Research Department of Botany
AVVM Sri Pushpam College (Autonomous)
Poondi-613 503, Thanjavur-Dt, Tamil Nadu, India.

Dr. P. MURUGANANTHAM
Associate Professor
Department of Botany
Jamal Mohamed College (Autonomous)
Tiruchirappalli, TamilNadu, India.

Date: 30.01.2018.

LINKAGE

For the year 2017-2018

Between

1. Dr. C. Chandran,
   Associate Professor
   PG & Research Department of Botany
   A.V.V.M Sri Pushpam College
   (Autonomous), Poondi – 613 503.

&

2. Dr. P. Muruganantham.
   Associate Professor,
   Department of Botany,
   Jamal Mohamed College (Autonomous),
   Tiruchirappalli, TamilNadu, India.

Considering the significance of the noble cause for the student community, we have come forward to collaborate with each other to exchange research knowledge, expertise, laboratory and library facilities to the process of scientific research and education in the field of Biological science. The parties (mentioned above as 1. & 2.) have had preliminary discussion in this matter and have ascertained areas of broad consensus. The parties now therefore agreed to enter in writing these avenues of consensus, under a flexible linkage, and this project aims to fill the gap between knowledge demand and subject expertise related to the mentioned field.

Joint Responsibilities

- Sharing of laboratory facilities, library resources, database etc.,
- Joint Publication of research articles, books, magazines, bulletins etc.,
- Jointly organizing conferences, seminars, symposia and workshops.
- Submitting joint proposals for research funding from agencies like UGC, CSIR, DST and TNSCST.
- Patenting Microbes, Plants patents Procedure, Product development and Novel equipments in Biological sciences (Indian and Foreign Patenting).

Dr. C. Chandran

Dr. P. Muruganantham

Life Science Informatics Publications

Research Journal of Life Sciences, Bioinformatics, Pharmaceutical and Chemical Sciences

Journal Home page http://www.rjlbpcs.com/

RJLBPCS

ISSN 2454-6348

Original Research Article

DOI: 10.26479/2018.0406.09

IN VITRO ANTIOXIDANT AND ANTIBACTERIAL ACTIVITY OF DIFFERENT EXTRACTS OF *MIMOSA PUDICA* L.

S. Ramesh[1*], P. Muruganantham[2], C. Karpagasundari[1], K. Karthikeyan[3], S. Madhavan[4], Chandran.C[1]

1. Department of Botany and Microbiology, A.V.V.M Sri Pushpam College (Autonomous), Poondi, Thanjavur. Dt, Tamil Nadu. India.

2.Department of Botany. Jamal Mohamed College (Autonomous), Tiruchirappalli, Tamil Nadu, India.

3. Department of Botany, Government Arts College Kumbakonam. Thanjavur, Dt, Tamil Nadu, India.

4. Department of Botany, M.R. Government Arts College Mannargudi. Tiruvarur. Dt, Tamil Nadu, India.

ABSTRACT: *Mimosa pudica* L is highly medicinal plants. It commonly known as sensitive plant, shame plant, prayer plant, touch me not. Antibacterial activity against gram positive and gram negative pathogenic bacteria were procured collection from Microbial Type Culture Collection (MTCC), Chandigarh, Punjob, India. *Escherichia coli,* (MTCC 433) *Bacillus subtilis,* (MTCC109), *Streptococcus pyogensis,* (MTCC 899) and *Klebsilla pneumonia* (MTCC 424) was determined by an agar well diffusion method. The root and leaf extract of the plants were extracted with four different solvents extracts, as ethyl acetate, ethanol, methanol and n- butanol. The results of this antibacterial screening showed that root and leaf of ethyl acetate extract (EtOAc) was displayed good activity for pathogenic bacteria. The antibacterial activity results were obtained for roots EtOAc MIC value between 18 ± 0.67, concentration 100 µl / MIC. These results may help to improve these natural antibacterial substances that could identified as bacterial disease. Antioxidant activity was analysed by the DPPH radical scavenging activity mechanism. The results showed that ethanol, ethyl acetate, n- butanol and methanol extract of *M. pudica* root and leaf. The most antioxidant activities against DPPH were displayed by the ethyl acetate extracts of *M. pudica* roots exhibiting 81.79 ± 4.77 and inhibition 81% respectively. The present results potential medicinal plants used by antioxidant, antibacterial and various properties were also present.

KEYWORDS: *Mimosa pudica*, Antibacterial activity, Phytochemical, Antioxidant activity, Medicinal uses.

Corresponding Author: S. Ramesh

Department of Botany and Microbiology, A.V.V.M Sri Pushpam College (Autonomous), Poondi, Thanjavur. Dt, Tamil Nadu. India. Email Address: rameshbiotech1986@gmail.com.