



**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. Prabakaran Assistant Professor Dept. of Botany,**

**M.R Arts College, Mannargudi.**



**Dr.A.PANNEERSELVAM**  
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PG and Research Department of Botany  
M.R Arts College  
Mannargudi, Tamil Nadu, India.



**Date: 18.08.2016**

### **LINKAGE**

**For the year 2016-2017**

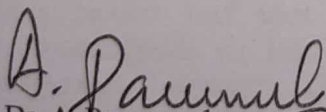
#### **Between**

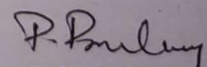
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| 1. Dr.A.Panneerselvam,<br>Associate Professor and Head (Rtd.,)<br>PG & Research Department of Botany<br>and Microbiology<br>A.V.V.M Sri Pushpam College<br>(Autonomous), Poondi – 613 503. | & | 2. Dr. P. Prabakaran<br>Assistant Professor<br>PG & Research Department of Botany<br>M.R Arts College,<br>Mannargudi, TamilNadu, India.. |
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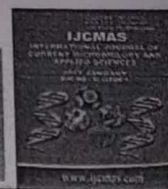
Considering the significance of the noble cause for the student community, we have come forward to collaborate with each other to exchange research knowledge, expertise, laboratory and library facilities to the process of scientific research and education in the field of Biological science. The parties (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. A. Panneerselvam

  
Dr. P. Prabakaran



## Original Research Article

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## Antagonistic Activity of Potential Soil Fungi against *Bipolaris oryzae* (Breda de Haan)

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### ABSTRACT

#### Keywords

Potential fungi,  
*Bipolaris oryzae*,  
 Biocontrol agents.

#### Article Info

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Fungal phytopathogens are causes of many plant disease and maximum loss of crop yields, especially in tropical regions. Chemical fungicides are extensively used in agriculture. However, these products may cause problems such as environmental pollution and affect human health, microorganism particularly fungi as biocontrol agents have high potential to control plant disease and eco-friendly without side effect on the environments. In the present investigation suggests that the antagonistic activity of some potential soil fungi against brown leaf spot pathogen *Bipolaris oryzae* were studied in *in vitro* experiment. The maximum potential soil fungi showed the ability to inhibit the pathogen in a broad aspects and the mechanism of the interaction studies were discussed.

### Introduction

Soil borne disease of rice may cause heavy losses to the crops at all stages of growth, seed germination, seedling and maturing plants (Harman 2000). Rice (*Oryza sativa* L.) is among the most important cereals in the world wide. On the basis of nutrition value, it is comparatively rated more than other cereals and plays a key role in nutrition (Alinia *et al.*, 2002). Rice brown leaf spot caused by *Bipolaris oryzae* Breda de Hann (formerly, *Helminthosporium oryzae*) (Teleomorph: *Cochliobolus miyabeanus*) is occurred in all rice-growing areas of the world. The pathogen causes infection on all growth stages of rice

plant from nursery to field and results in significant yield and grain quality losses. Rice brown leaf spot was a major factor for the Great Bengal Famine during 1942–1943 (Ou, 1895). In 1956, the disease was reported by Petrak at the first time from some developed countries and then it was reported by Sharif and Ershad from coastal area of Caspian sea in 1966 (Ershad, 1995). The disease is prevalent in northern provinces countries and under environmental conditions conducive to disease; it can cause severe yield loss (Khosravi *et al.*, 2007 and Sivanesan, 1987).