International Journal of
Nanotechnology and Allied Sciences ISSN: 2523-9252 (Online)

Short Communication 2019 | Volume 3 | Issue 2 | 45-49

**Article Info**

**Open Access**

**Citation:** Rasool, S., Arshad, R., Iqbal, F., Iqbal, I., 2019. Isolation and Identification of Bacteria from the Rhizoplane of Rice. Int. J. Nanotechnol. Allied Sci., 3(2): 45-49.

Received: June 18, 2019

Accepted: September 10, 2019

Published: September 30, 2019

**Corresponding Author:**
Saadit Rasool

**Email:**
saadit.2084@gmail.com



Scan QR code to see this publication on your mobile device.

# Isolation and Identification of Bacteria from the Rhizoplane of Rice

**Saadit Rasool[1], Rubina Arshad[2], Faiza Iqbal[1], Iqra Iqbal[3,4]**

[1]University of Agriculture, Faisalabad, Pakistan.
[2]Nuclear Institute for Agriculture and Biology, Faisalabad, Pakistan.
[3]Department of Zoology, Government College Women University Sialkot, Pakistan.
[4]Pakistan Science Mission (PSM), Narowal (Noor Kot 51770), Pakistan.

**Abstract:**
This study was conducted to characterize bacterial diversity in the rhizoplane of rice. Soil samples were collected in sterile Petri plates from the rhizoplane of different rice varieties grown in the Net house. Samples were analyzed for their bacterial content following colony morphology, microscopic and biochemical characters. Bacterial density recorded was in the range of $3.51 \times 10^4$ - $2.63 \times 10^6$ organisms per gram of soil. The isolated microbes were represented by a mixed population of five species (*Bacillus* sp., *Staphylococcus* sp., *Streptococcus* sp., *Pseudomonas* sp., and *Escherichia coli*). This study revealed that the bacterial population in the rhizoplane of rice varies significantly which may have an impact on the plant roots for their tolerance to stress.
**Keywords:** Bacterial diversity, rhizoplane, rice, tolerance to stress, net house.