

A study on

Pathogenicity standardisation of *Ralstonia solanacearum* in brinjal seedlings under soil and nutrient free condition.

A report submitted in partial fulfilment of the requirements for the degree of Bachelors of Science in Microbiology

under



ROYAL GLOBAL UNIVERSITY
GUWAHATI

Submitted by

Debosri Roy

Royal Global University

Department of Microbiology

Bachelor of Science

Registration no. 1190604

Roll no. 192163004

Under the supervision of

Dr. Niraj Singh

Assistant Professor

Department of Microbiology

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The Assam Royal Global University, Betkuchi, (opposite to Balaji Temple), Guwahati 781035, India

Dr. Niraj Singh

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ROYAL GLOBAL UNIVERSITY

GUWAHATI

CERTIFICATE OF THE CO-ORDINATOR

This is to certify that Debosri Roy of 6th semester, Department of Microbiology has worked on the project entitled, "Pathogenicity standardization of *Ralstonia solanacearum* in brinjal seedlings under soil and nutrient free condition" under my supervision towards the partial fulfilment of the degree of B.SC Microbiology under The Assam Royal Global University, Guwahati. No part of this study has been submitted elsewhere for the award of any degree.

HOD/Coordinator
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(Dr. Niraj Singh)

Co-ordinator

Date

Place: Guwahati, Assam

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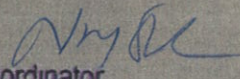


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HOD/Coordinator

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(Dr. Niraj Singh)

Place: Guwahati, Assam

Co-ordinator

PATHOGENICITY STANDARDIZATION OF *Ralstonia solanacearum* IN CHILLI SEEDLING UNDER SOIL AND NUTRIENT FREE CONDITION.



ROYAL GLOBAL UNIVERSITY

— GUWAHATI —

A Dissertation submitted for the partial fulfilment of the requirements for Bachelor of Science Degree in Microbiology

Offered by

The Assam Royal Global University

Submitted by-

NIRUPAM LAHKAR

Roll. No.: 192153012

Registration No: 1190612

B.Sc. Microbiology, 6th Semester

Session: 2019-2022

Supervised by-

Dr. Niraj Singh

Assistant Professor

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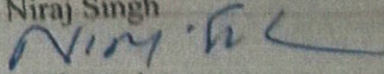
Royal School of Bioscience

CERTIFICATE OF CO-ORDINATOR

This is to certify that **Mr. Nirupam lahkar**, student of B sc. 6th semester, Department of Microbiology has worked on the project entitled, "**Pathogenicity standardization of *Ralstonia solanacearum* in chilli seedling under soil and nutrient free condition**" towards the partial fulfillment of the degree of B sc. in Microbiology under The Assam Royal Global University, Guwahati. No part of this study has been submitted elsewhere for award of any degree.

Date: 30/8/22

Place: Guwahati, Assam

Dr. Niraj Singh

(Co-ordinator)
HOD/Coordinator
Department of Microbiology
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The Assam Royal Global University
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Effect of Calcium chloride and Calcium carbonate against *Ralstonia solanacearum* and Pathogenicity standardization of *Ralstonia solanacearum* in chilli seedlings under soil and nutrient free condition



A Dissertation submitted for the partial fulfilment of the requirements for
Bachelor of Science Degree in Microbiology

Offered by

The Assam Royal Global University

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Roll No.: 202153009

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This is to certify that Ms. Deijee Kashyap, student of B.Sc. 6th semester, Department of Microbiology has worked on the project entitled, "Effect of Calcium chloride and Calcium carbonate against *Ralstonia solanacearum*" and "Pathogenicity standardization of *Ralstonia solanacearum* in chilli seedlings under soil and nutrient free condition" towards the partial fulfillment of the degree of BSc. in Microbiology under The Assam Royal Global University, Guwahati. No part of this study has been submitted elsewhere for award of any degree.

Dr. Niraj Singh

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Betkuchi, NH 37 Guwahati 781035

Date:

Place: Guwahati, Assam

Betkuchi, (opposite to Tirupati Balaji Temple), Guwahati-781035, Assam, India

Royal School Of Bio-Science

Guwahati -781035



**ROYAL GLOBAL UNIVERSITY
GUWAHATI**

PROJECT REPORT

ON

A study on Bio remediation of crude oil

Submitted by-

NAME- Amit Priyam Ray

REGISTRATION No-1200633

ROLL No-202153004

BSc 6 Semester

Project Guide:

Dr Debajit Kalita

ASST. PROFESSOR

DEPARTMENT OF MICROBIOLOGY

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Dr. Niraj Singh

Phone: 9678462554

Assistant Professor

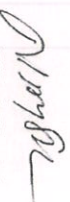
Email : nsingh@rgu.ac

CERTIFICATE OF THE COORDINATOR

This is to certify that Amit Priyam Ray, student of B.Sc 6th semester, department of Microbiology has work on the project entitled, "Bio Remediation of Crude Oil". Under my supervision towards the partial fulfillment of the degree of B.Sc in microbiology under the Assam Royal University Guwahati. No part of the study has been submitted elsewhere for award of any degree.

Date: 28/07/23

Place: Guwahati, Assam


(Niraj Singh)

HOD/Coordinator
Department of Microbiology
Royal School of Bio- Sciences
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Betkuchi, NH 37 Guwahati, 781035

Pathogenicity of standardization of *Ralstonia solanacearum* in tomato seedling under soil and nutrient free condition

A dissertation submitted to the Department of Microbiology, The Assam Royal Global University for the partial fulfilment of the degree of Bachelor of Science in Microbiology.



ROYAL GLOBAL UNIVERSITY
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SUBMITTED BY-

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CERTIFICATE OF THE CO-ORDINATOR

This is to certify that Miss Kabirakalita, student of B.sc 6th semester, Department of Microbiology, has worked on the project entitled, "Pathogenicity standardization of *Ralstoniasolanacearum* in tomato seedlings under soil and nutrient free condition" towards partial fulfillment of the degree of B.sc in Microbiology under The Assam Royal Global University, Guwahati. No part of this study has been submitted elsewhere for award of any degree.

Date: 30/07/22

Place:

Dr. Niraj Singh

HOD/Co-ordinator

Department of Microbiology
Royal School of Bio- Sciences
The Assam Royal Global University
Belkuchi, NH 37 Guwahati 781035

**BACTERIOLOGICAL QUALITY OF A POPULAR STREET FOOD – PHUSKA / PANIPURI
SOLD IN GUWAHATI, ASSAM**



ROYAL GLOBAL UNIVERSITY
— GUWAHATI —

Dissertation submitted to The Assam Royal Global University in partial fulfillment of the requirements for the award of this degree of

BACHELORS OF SCIENCE

in

MICROBIOLOGY

Submitted by:

Shruti Chakravarty

Registration No:1906011

Roll No:192153011

B. Sc. Microbiology 6th Semester

Under the supervision of

Dr. Trishnamoni Gautom

Assistant Professor

Department Of Microbiology

Royal School of Biosciences

THE ASSAM M ROYAL GLOBAL UNIVERSITY
BETKUCHI, NH-37, GHY-781035, ASSAM, INDIA

2022



ROYAL GLOBAL UNIVERSITY
GUWAHATI

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CERTIFICATE OF THE CO-ORDINATOR

This is to certify that Ms. ShrutiChakravarty, student of B.Sc 6th semester, Department of Microbiology has worked on the project entitled, “**Bacteriological Quality of a Popular Street Food –Phuska/PaniPuri sold in Guwahati, Assam**” towards the partial fulfillment of the award of the degree of B.Sc in Microbiology under The Assam Royal Global University, Guwahati. No part of this study has been submitted elsewhere for award of any degree.

Date: 27/07/22

Place: Guwahati, Assam

Dr. Niraj Singh

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