

DECLARATION

I do hereby declare that:

- a. The work contained in this thesis entitled “**Leaf age correlation to phyllosphere microbe-microbe, plant-microbe interactions on *Solanum lycopersicum***” submitted by me for the award of the degree of **Doctor of Philosophy in Biotechnology** is a bonafide record of research work carried out by me in Amity University Uttar Pradesh, under the supervision of Prof. P. K. Paul and co-supervision of Prof. P. D. Sharma. The work has not been submitted to any other institute/university for any degree or diploma.
- b. I have followed the guidelines provided by the University in preparing the thesis.
- c. I have confirmed to the norms and guidelines given in the Ethical Code of Conduct of the University and Institute.

Date:

Signature of the candidate

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ABBREVIATIONS

ANOVA - analysis of variance
bp - base pair
BLAST - Basic Local Alignment Search Tool
CFU - Colony forming units
cm - centi metre
conc. - Concentration
RNA - ribonucleic acid
EDTA - Ethylene diamine tetra acetic acid
Fig. - Figure
g - gram
h - hour
IAA - indole-3-acetic acid
ICP- inter cellular fluid proteins
L/D - Light/Day
mg - milli gram
min - minute
ml - milli litre
mM - milli molar
NCBI - National Center for Biotechnology Information
No. - Number
°C - degree Celsius
PAGE - polyacrylamide gel electrophoresis
PAL - Phenylalanine ammonia-lyase PAMP -
pathogen-associated molecular pattern PGI-
Percent growth inhibition POX - Peroxidase

PPO - Polyphenol oxidase
PR - pathogenesis-related
RH - Relative humidity
ROS - Reactive Oxygen Species
RT - Room temperature
SAS - Statistical Analysis System
sec - seconds
SD - Standard Deviation
SDS - Sodium dodecyl sulphate SPSS -
Statistical Package for the Social Sciences TAL -
Tyrosine ammonia-lyase TCA - trichloroacetic
acid
UV - Ultra violet
v/v - volume / volume
w/v - weight / volume
w/w - weight/weight
wt. - weight
ε - molar extinction
coefficient μg - microgram
μl - micro litre

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