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ABBREVIATIONS AND SYMBOLS

ADP	Adenosine diphosphate
AIA-SEM	Automatic image analysis SEM
Al-P	Aluminum phosphate
ATP	Adenosine triphosphate
AMF	Arbuscular mycorrhizal fungi
As	Arsenic
BMs	Beneficial microorganisms
% BS	Alkali percent saturation
C	Carbon
Ca	Calcium
Ca-P	Calcium phosphate
Ca ₃ (PO ₄) ₂	Calcium phosphate
Cd	Cadmium
C	Carbon
°C	Degree celsius
CC-SEM	Computer-controlled SEM
CEC	High cation exchange capacity
CFU	Colony forming units
Cm	Centimeter
C:N ratio	Ratio of carbon to nitrogen
CO ₂	Carbon dioxide
-COOH groups	Carboxylic acid groups
DMSO	Dimethyl sulfoxide
DNA	Deoxyribonucleic acids
DSE	Dark septate endophytes
DW	Dry weight
e ⁻	Electron
EDX	Energy dispersive X-rays
EC	Electrical conductivity.

ABBREVIATIONS AND SYMBOLS (CONTINUED)

FA	Fulvic acid
g	Gram
H	Hydrogen
H ⁺ -ATPase	Proton-pumping ATPase
HA	Humic acid
HCN production	Hydrogen cyanide produced
hr	Hour
HS	Humic substances
HPSEC	High performance size exclusion chromatography
IAA	Indole acetic acid
lbs	Pounds
IL	Improved leonerdite
K	Potassium
KDML 105	Khao Dawk Mali 105
kg	Kilogram
KCl	Potassium chloride
LD	Leonardite
LDAc	Leonardite
LDB	Leonardite bacteria
LDF	Leonardite fungi
LSD	Least significant difference
meq g ⁻¹	Milliequivalents
Mg	Magnesium
mg/L	Milligram per litre
mM	Millimolar
mg	Milligram
mL	Milliliter
MWHC	Maximum water holding capacity
N	Nitrogen

ABBREVIATIONS AND SYMBOLS (CONTINUED)

NADP	Nicotinamide adenine dinucleotide phosphate
NH ⁴⁺	Ammonium
NH ₄ OAc	Ammonium acetate
nmole	Nanomole
NO ₃ ⁻	Nitrate
O	Oxygen
OL	100% leonardite
OM	Organic matter
-OH groups	Hydroxyl groups
P	Phosphorus
Pb	Lead
PGPM	Plant growth promoting microorganisms
PGPR	Plant growth-promoting rhizobacteria
PVK	Pikovskaya's
PSB	Phosphate solubilizing bacteria
pH	Potential of hydrogen ion
RCBD	Randomized complete block design
RNA	Ribonucleic acids
S	Sulfur
SEM	Scanning electron microscopy
SEM-EDX	Scanning electron microscopy coupled to energy dispersive X-ray
SOM	Soil organic matter
Tr	Treatments
UV	Ultraviolet
µg/mL	Microgram per millilitre
µg	Microgram
µM	Micromole
µmol	Micromole

ABBREVIATIONS AND SYMBOLS (CONTINUED)

XRD	X-ray diffraction analysis
XRF	X-ray fluorescence spectrometry



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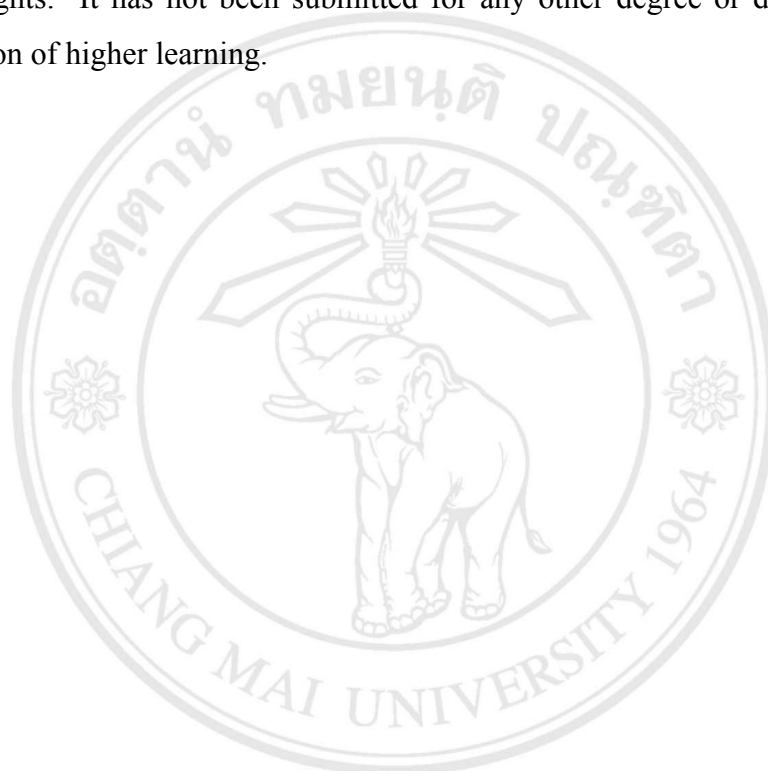
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STATEMENTS OF ORIGINALITY

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