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ABBREVIATIONS AND SYMBOLS

°C	Degree Celsius
µg/l	microgram per lite
µg/mL	Microgram per millilitre
µmol	Micromole
Al-P	Aluminum phosphate
ars	arsenic-resistant gene
As	Arsenic
As(III)	Arsenite
AS(V)	Arsenate
As^{+3}	Arsenite
As^{+5}	Arsenate
ASV	Anodic stripping voltammetry
ATP	Adenosine triphosphate
ATSDR	Agency for Toxic Substances and Disease Registry
C	Carbon
Ca	Calcium
$Ca_3(PO_4)_2$	Calcium phosphate
CAO	Chemoautotrophic Arsenite Oxidizer
Ca-P	Calcium phosphate
CCA	chromated copper arsenate
Cd	Cadmium
CEC	High cation exchange capacity
CFU	Colony forming units
Cm	Centimeter
cm^2	centimetre squared
CO_2	Carbon dioxide
CRD	Completely Randomized Design
DMA	dimethylarsinic acid
DMSO	Dimethyl sulfoxide

ABBREVIATIONS AND SYMBOLS (CONTINUED)

DNA	Deoxyribonucleic acids
DW	Dry weight
e^-	Electron
g	Gram
GC	Gas chromatography
H	Hydrogen
HAOs	heterotrophic arsenite oxidizers
HG-AAS	hydride generation-atomic absorption spectrometry
HPLC	High-pressure liquid chromatography
hr	Hour
IAA	Indole acetic acid
IARC	The International Agency for Research on Cancer
ICP-AES	inductively coupled plasma atomic emission spectrometer
ICP-MS	Inductively Coupled Plasma Mass Spectrometry
K	Potassium
KCl	Potassium chloride
kg	Kilogram
LC	Liquid chromatography
LD_{50}	Lethal dose 50%
LOD	Limit of detection
LSD	Least significant difference
MCL	maximum contaminant level
Mg	Magnesium
mg	Milligram
mg/kg	milligrams per kilogram (equivalent to ppm)
mg/L	Milligram per litre
mL	Milliliter
mM	Millimolar
MMA	monomethylarsonic acid

ABBREVIATIONS AND SYMBOLS (CONTINUED)

MSM	monosodium methanearsonate, the sodium salt of MMAA
N	Nitrogen
Na-As(III)	Sodium arsenite
nd	below analytical detection limit
ng/m^3	Nanogram per cubic meter
O	Oxygen
-OH groups	Hydroxyl groups
OM	Organic matter
OM	Organic matter
P	Phosphorus
Pb	Lead
PGPM	Plant growth promoting microorganisms
PGPR	Plant growth-promoting rhizobacteria
pH	Potential of hydrogen ion
ppm	parts per million (equivalent to mg/kg)
PSB	Phosphate solubilizing bacteria
PVK	Pikovskaya's
RNA	Ribonucleic acids
rpm	Round per minute
S	Sulfur
Tr	Treatments
U.S. EPA	The United State Environmental Protection Agency
USEPA	United States Environmental Protection Agency
UV	Ultraviolet
UV-vis	Ultraviolet-visible
WHO	World Health Organization
µg	Microgram
µM	Micromole

ข้อความแห่งการริเริ่ม

ข้าพเจ้าขอรับรองว่าวิทยานิพนธ์ฉบับนี้เป็นผลงานวิจัยริเริ่มยกเว้นในกรณีเอกสารอ้างอิงข้าพเจ้าขอรับรองว่าวิทยานิพนธ์นี้ไม่ได้ละเมิดลิขสิทธิ์กรรมสิทธิ์และเทคนิคใดๆจากการทำงานของคนอื่นๆ และผลงานของข้าพเจ้านี้ไม่ได้ถูกส่งไปเพื่อขอประกาศนียบัตรหรือปริญญาบัตรจากสถาบันอื่นๆของระดับการศึกษาที่สูงขึ้น

STATEMENTS OF ORIGINALITY

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