

Our Ref : ACL/MIS-OTH 220158

Company : **DR AHMAD BUKHARY BIN AHMAD KHAIR**
 School of Biological Sciences
 G08 Building, Universiti Sains Malaysia
 11800 USM Pulau Pinang

Sample description : Received one (1) samples labelled as **Postharvest Soil**
Marking: USM Penang L14-Building, Plant House - Chemical Fertilizer
NPK Compound Fertilizer

Results of Analysis

Parameter	Unit	Method	Results
pH	-	In House based on APHA 4500 H ⁺ B	7.7
Exchangeable Potassium	mg/L	MS 678: Pt. I to V : 1980	140.0
Exchangeable Calcium	mg/L	MS 678: Pt. I to V : 1980	51.5
Exchangeable Magnesium	mg/L	MS 678: Pt. I to V : 1980	17.5
Cation Exchange Capacity	meq/100g	MS 678: Pt. I to V : 1980	6.6
Total Organic Carbon	%w/w	MS678:Pt I to IV:1980	0.8
Total Organic Matter	%w/w	In House	7.7

Note:

"<" denote "Less Than"



MOHD BADRULLAH BIN BUANG
 BSc(Hons), LMIC
 IKM Registered Chemist : L/2784/8241/18


Our Ref : ACL/MIS-OTH 220158/A

Company : **DR AHMAD BUKHARY BIN AHMAD KHAIR**
School of Biological Sciences
G08 Building, Universiti Sains Malaysia
11800 USM Pulau Pinang

Sample description : Received one (1) samples labelled as **Postharvest Soil**
Marking: USM Penang L14-Building, Plant House - Chemical Fertilizer
NPK Compound Fertilizer

Results of Analysis

Parameter	Unit	Method	Results
Total Nitrogen	%w/w	MS 1120 (2004)	0.33
Available Phosphorus	mg/kg	Bray Extraction	255

*Note:**"<" denote "Less Than"*

MOHD BADRULLAH BIN BUANG
BSc(Hons), LMIC
IKM Registered Chemist : L/2784/8241/18

Our Ref : ACL/MIS-OTH 220158/B
Company : **DR AHMAD BUKHARY BIN AHMAD KHAIR**
School of Biological Sciences
G08 Building, Universiti Sains Malaysia
11800 USM Pulau Pinang

Sample description : Received one (1) samples labelled as **Postharvest Soil**
Marking: USM Penang L14-Building, Plant House - Chemical Fertilizer
NPK Compound Fertilizer

Results of Analysis

Parameter	Unit	Method	Results
C/N Ratio	-	In-House	2.4

*Note:**"<" denote "Less Than"*

MOHD BADRULLAH BIN BUANG
BSc(Hons), LMIC
IKM Registered Chemist : L/2784/8241/18


Our Ref : ACL/MIS-OTH 220158/C

Company : **DR AHMAD BUKHARY BIN AHMAD KHAIR**
School of Biological Sciences
G08 Building, Universiti Sains Malaysia
11800 USM Pulau Pinang

Sample description : Received one (1) samples labelled as **Postharvest Soil**
Marking: USM Penang L14-Building, Plant House - Chemical Fertilizer
NPK Compound Fertilizer

Results of Analysis

Parameter	Unit	Method	Results
Soil Conductivity	$\mu\text{S/cm}$	MS 678:Part VI to IX:1980	279

*Note:**"<" denote "Less Than"*

MOHD BADRULLAH BIN BUANG
BSc(Hons), LMIC
IKM Registered Chemist : L/2784/8241/18

Our Ref : ACL/MIS-OTH 220334

Company : **DR AHMAD BUKHARY BIN AHMAD KHAIR**
School of Biological Sciences
G08 Building, Universiti Sains Malaysia
11800 USM Pulau Pinang

Sample description : Received one (1) samples labelled as **Postharvest Soil Marking:
USM Penang L14-Building, Plant House - Chemical Fertilizer
NPK Compound Fertilizer**

Results of Analysis

Parameter	Unit	Method	Results
Total Potassium as K	mg/kg	ICP-OES	2,115.0


MOHD BADRULLAH BIN BUANG
BSc(Hons), MMIC
IKM Registered Chemist : M/5949/8241/18/22

Our Ref : ACL/MIS-OTH 220341
Company : **DR AHMAD BUKHARY BIN AHMAD KHAIR**
School of Biological Sciences
G08 Building, Universiti Sains Malaysia
11800 USM Pulau Pinang

Sample description : Received one (1) samples labelled as **Postharvest Soil Marking:**
USM Penang L14-Building, Plant House - Chemical Fertilizer
NPK Compound Fertilizer

Results of Analysis

Parameter	Unit	Method	Results
Total Sulphur as S	mg/kg	ICP-OES	155.0



MOHD BADRULLAH BIN BUANG
BSc(Hons), MMIC
IKM Registered Chemist : M/5949/8241/18/22

Our Ref : ACL/MIS-OTH 220292

Company : **DR AHMAD BUKHARY BIN AHMAD KHAIR**
School of Biological Sciences
G08 Building, Universiti Sains Malaysia
11800 USM Pulau Pinang

Sample description : Received one (1) samples labelled as **Postharvest Soil Marking:**
USM Penang L14-Building, Plant House - Chemical Fertilizer
NPK Compound Fertilizer

Results of Analysis

Parameter	Unit	Method	Results
Total Phosphorus	mg/kg	ICP-OES	2890.0
Ammonium	mg/kg	Ion Chromatography	277.9
Nitrate	mg/kg	Ion Chromatography	0.02
Nitrite	mg/kg	Ion Chromatography	0.01

*Note:**"ND" denotes "Not Detected"**"<" denotes "Less Than"*

MOHD BADRULLAH BIN BUANG
BSc(Hons), MMIC
IKM Registered Chemist : M/5949/8241/18/22

Our Ref : ACL/MIS-OTH 220351

Company : **DR AHMAD BUKHARY BIN AHMAD KHAIR**
School of Biological Sciences
G08 Building, Universiti Sains Malaysia
11800 USM Pulau Pinang

Sample description : Received one (1) samples labelled as **Postharvest Soil Marking:
USM Penang L14-Building, Plant House - Chemical Fertilizer
NPK Compound Fertilizer**

Results of Analysis

Parameter	Unit	Method	Results
Sulphate as SO ₄	% w/w	MS 678 : Part VI to IX:1980	1.9
Sulphide as S ²⁻	mg/kg	APHA 4500-S ₂ -D	0.6
Phosphate as PO ₄	mg/kg	APHA 4500-P-F	319.6

Note:

"<" denotes "Less Than"



MOHD BADRULLAH BIN BUANG
BSc(Hons), MMIC
IKM Registered Chemist : M/5949/8241/18/22


Our Ref : ACL/MIS-OTH 220356

Company : **DR AHMAD BUKHARY BIN AHMAD KHAIR**
School of Biological Sciences
G08 Building, Universiti Sains Malaysia
11800 USM Pulau Pinang

Sample description : Received one (1) samples labelled as **Postharvest Soil Marking:
USM Penang L14-Building, Plant House - Chemical Fertilizer
NPK Compound Fertilizer**

Results of Analysis

Parameter	Unit	Method	Results
Crude Fiber	% w/w	MS 1414 (1997)	2.1


MOHD BADRULLAH BIN BUANG
BSc(Hons), MMIC
IKM Registered Chemist : M/5949/8241/18/22