IBD LABORATORY SERVICES

CHROMATOGRAPHY

Eurycomanone

analysis

Essential Oil

(new, Q4)

(Q4)

3. LCMS/MS

Marker compound

Vitamin B and C

Fatty acid analysis

Sample treatment

*Accredited under

SAMM for ISO/

(Eurycomanone

Compound Profiling

Marker Compound

quantification

Eurvcomanone

Cordycepin

& Cordycepin)

IEC 17025

ANALYSIS

1. HPLC

2. GC

CHEMICAL TESTING

1. Macro and micronutrient

- Total Nitrogen, N
- Phosphorus, P
- Potassium, K
- · Calcium, Ca
- Magnesium, Mg
- Boron, B
- Molybdenum, Mo
- Ferum. Fe
- Manganese, Mn
- Sodium, Na

2. Element Analysis (ICP-MS)

- Cadmium, Cd
- Lead. Pb
- Arsenis, As
- Mercury, Hg
- Aluminum, Al
- Chromium, Cr
- Nickel, Ni
- Silver, Ag
- Beryllium, Be
- Cobalt, Co
- Vanadium, V
- Copper, Cu
- Selenium, Se
- Strontium Sr
- Zink, Zn

3. Water Analysis

- PH
- Total Phosporus
- Chromium
- Copper
- Magnesium
- Sodium
- Kalium
- RanumFerum
- Calcium
- Turbidity*
- Total Suspended Solid*
- 4. Moisture (moisture analyzer)
- 5. Antioxidant (DPPH, TPC)

MICROBIOLOGY TESTING

- 1. Beneficial microbe Analysis *Accredited under SAMM for ISO/IEC 17025
 - Actinomycetes
 - Yeast
 - Lactobacillus
 - Nitrogen Fixing
 - Nitrifying
- 2. Pathogen microbe Analysis *Accredited under SAMM for ISO/IEC 17025
 - Salmonella spp
 - Pseudomonas
 - E.coli
 - Yeast & Mold Count
 - Enterobacter
 - Staphylococcus aureus

3. Anti-microbial Testing

- Gram positive
- · Gram negetive
- Yeast
- Total bacteria count

FOOD ANALYSIS

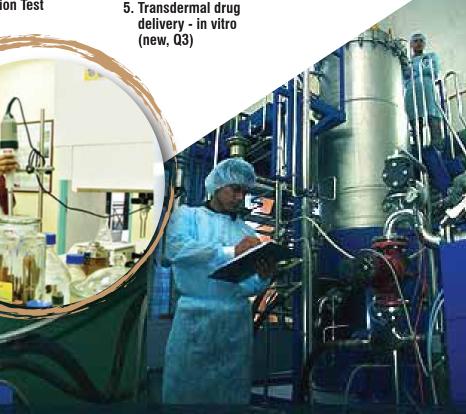
- 1. Proximate Analysis
 - *Accredited under SAMM for ISO/IEC 17025
 - Protein
 - Fat
 - Ash
 - Moisture
 - Energy
 - Carbohydrate
 - Crude Fiber
- 2. Sensory Evaluation Test
- 3. Dissolution Test

COSMECEUTICAL AND FRAGRANCE ANALYSIS

- 1. Particle size and PDI
- 2. Sensory evaluation cosmetic and fragrance
 - Skin Feel
 - Spreadability
 - Tackiness / greasiness / stickiness
 - After-feel
 - Fragrance acceptance

3. Skin physiological analysis - In house

- Skin elasticity
- Skin collagen intensity
- Skin colour evaluation (melanin and erythema index value)
- Skin surface pH evaluation
- Skin surface sebum evaluation
- Transepidermal water loss (TEWL)
- 4. Facial imaging In house (new, Q3)
 - Wrinkle
 - Pore size
 - Skin roughness
 - Spot
 - UV acne
 - UV spot
 - UV moisture



Website IBD www.ibd.utm.my

dities

Bioreactor









IBD LABORATORY SERVICES

INTRODUCTION

Institute Bioproduct Development (IBD) under Laboratory Services division assures that all the laboratory staffs are committed to meet customer requirement and satisfaction by providing professional services, particularly on staff competency, testing reliability and good quality system. In line with the IBD vision to be the Leading Centre in Researchand Business Development of Speciality Chemicals and Biochemicals, the laboratories shall adopt and complywith the requirements of National Laboratory Accreditation Scheme (Skim Akreditasi Makmal Malaysia, SAMM) under International Standard of MSISO/IEC17025.

OBJECTIVE

To provide good laboratory services with adherence to the quality assurance and control in this quality manual. Staff competency and technical reliability are of great importance to achieve customer requirement and satisfaction.

SERVICES AND RESEARCH AREA

- Natural products
- Pharmaceuticals
- Medicinal Compounds
- Cosmetics
- Food Products
- Biological samples
- Fertilizers and
- Environmental samples.

LABORATORY • SERVICES •

- Chemical Testing
- Microbiology Testing
- Food Analysis
- Chromatography Analysis
- Cosmeceutical and Fragrance Analysis



Research collaborations with researchers from UTM, other high ereducational institutions, research institutions, governments and privates agencies including NGO's are welcome. Laboratory facilities for research, educational and training activities are available. Class and hands-on teaching courses on analytical testing techniques for herbal and natural products, heavy metals and microbiological samples are provided, as well as for method development and validation



AWARDS AND ACHIEVEMENTS

• Certified MS ISO/IEC17025 under Department of Standard Malaysia

> BioNexus Partner Programme under Biotechcorp Sdn. Bhd.

Contact

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