



IBD LABORATORY SERVICES (IBDLS)

IBD is provide professional testing services for chemical and microbiological samples, primarily in food, herbal based product, nutraceutical, chemical fertilizer, bio-organic fertilizer and cosmetics products. The laboratory is supported with well-trained & competent personnel in sample handling & testing.

HISTORY

IBDLS has successfully obtained ISO/IEC 17025 SMM accreditation since 27 August 2009 from Department Standard Malaysia (DSM) for proximate analysis, microbiology analysis and water analysis. The testing scope have been extended to cordycepin & Eurycomanone identification in 2011 and beneficial microbe in soil & fertilizer in 2015. The laboratory also has awarded BioNexus partner in 2011 by Malaysian Biotechcorp Sdn Bhd.

OUR STRENGTH

- The IBD quality system is accredited to ISO/IEC 17025:2017 with SMM no 433
- IBD meets the technical competence and management system requirements necessary to consistently deliver technically valid test results and services.
- Efficient, quality driven & Professional

LABORATORY ANALYTICAL SERVICES

- Nutritional testing
- Microbiological Testing
- Macro & micro nutrient Testing
- Biofertilizer & fertilizer testing
- Others
 - Validation studies for new formula
 - Cosmeceutical Testing

CONTACT

Administration
 Asmarahana Binti Ibrahim
 Administrative Assistant
 Institute of Bioproduct Development Universiti
 Teknologi Malaysia 81310 Skudai, Johor
 Tel No:+607-5531559
 E-mail: asmarahana@ibd.utm.my

Head of laboratory
 Siti Hajar Mat Sarip
 Head of Analytical & Biovalidation unit
 IBD Laboratory Services
 Institute of Bioproduct Development UTM Johor Bahru
 Tel: 07-5531648
 E-mail: hajareibd.utm.my

AWARDS AND ACHIEVEMENTS

MS ISO/IEC 17025 CERTIFICATION
 AWARDED BY DEPARTMENT OF
 STANDARD MALAYSIA

BIONEXUS LABORATORY AWARDED BY
 MALAYSIAN BIOTECHCORP

A) CHEMICAL TESTING

1) Macro and micronutrient

(Fertilizer, herb, food sample)

- a. Total Nitrogen, N
- b. Phosphorus, P
- c. Potassium, K
- d. Calcium, Ca
- e. Magnesium, Mg
- f. Boron, B
- g. Molybdenum, Mo
- h. Ferum, Fe
- i. Manganese, Mn
- j. Sodium, Na

2) Elemental analysis (ICP-MS)

(Herb, water, food sample)

Main parameter

- a. Cadmium, Cd
- b. Lead, Pb
- c. Arsenic, As
- d. Mercury, Hg

Others

- e. Aluminium, Al
- f. Chromium, Cr
- g. Nickel, Ni
- h. Silver, Ag
- i. Beryllium, Be
- j. Cobalt, Co
- k. Vanadium, V
- l. Copper, Cu
- m. Selenium, Se
- n. Strontium, Sr
- o. Zink, Zn

3) Moisture

4) pH (APHA 4500H+B)

5) Antioxidant (DPPH)

6) Total Phenolic Compound (TPC)

B) MICROBIOLOGY TESTING

1) Beneficial microbe Analysis

*ISO/IEC 17025 Accredited

- a. Actinomycetes
 - b. Yeast
 - c. Lactobacillus
 - d. Nitrogen Fixing
 - e. Nitrifying
- Quantitative 30 days
 - Qualitative 7 days (present/absent)

3) Pathogen microbe Analysis

*ISO/IEC 17025 Accredited

- a. Salmonella spp
 - b. Pseudomonas
 - c. E.coli
 - d. Yeast & Mold Count
 - e. Total Viable Aerobic count
 - f. Enterobacter
 - g. Staphylococcus aureus
- Additional
- h. Candida albican
 - i. Coliform

4) Anti-microbial Testing

- a. Gram positive
- b. Gram negative
- c. Yeast

C) COSMECEUTICAL AND FRAGRANCE ANALYSIS

1) Sensory evaluation - cosmetic

and fragrance

- Skin Feel
- Spreadability
- Tackiness/greasiness/stickiness
- After-feel
- Fragrance acceptance

D) FOOD ANALYSIS

1) Proximate Analysis

* ISO/IEC 17025 Accredited

- a. Protein
 - b. Fat
- Soxhlet for solid sample
 - Hydrolysis for liquid sample
- c. Ash
 - d. Moisture
 - e. Energy
 - f. Carbohydrate
 - g. Crude Fiber

Additional

- h. Dietary fiber

2) Sensory Evaluation Test

3) Dissolution test

E) INSTRUMENT AVAILABLE

- 1) HPLC
 - RI Detector
 - Florescence Detector
 - PDA Detector
 - UV Detector
- 2) FTIR
- 3) FPLC
- 4) LCMS/MS
- 5) ICPMS
- 6) MICROWAVE DIGESTOR

