

**Researchers:**

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▶ TRADEMARK (TM2019026029)

▶ PATENT SEARCH: NOVEL, INVENTIVE, INDUSTRIAL APPLICABLE



# BOTANY

Nutri Essence



## BOTANY NUTRI BALANCE



### Introduction

Botany Nutri Balance is the breakthrough in plant nutrition, that contains complete, balanced and stabilized macronutrients, micronutrients and specific bio-extract as growth booster and natural pesticides for fast yielding food crops. This unique invention has been supported by a full assessment of changing biochemical and physiological characteristics, enzymatic activities and defense mechanisms, and the associated health risks evaluation.

### Novelty, Inventiveness and Intellectual Property Status

- Long Shelf Life
- Versatile
- Growth Booster
- Pest Control
- Health Assurance
- Simplicity of Application
- Economic Feasible
- Protected under Trademark and patent application in progress

### Applicability and Commercialization Potential

- Soilless Cultivation
- Germination
- Feeding Seedlings
- Transplants and Clones
- Foliar Feeding
- Pest Control

### Product and Technology Readiness

- TRL 8 First of kind commercial system
- Successful Innovation of A Complete, Balanced, and Stabilized Nutrient in A Single Formulation
- Integration of Bio-Extract for Fast Yielding Food Crops
- Scientifically Driven Analysis for Safe and Nutritious Food Crops Production

### Research Achievement

- Publications: UNESCO Publishing, Book Chapter; iMIT-SIC Book Chapter; Journal of Cleaner Production; Journal of Water and Health; 37<sup>th</sup> International World Congress, Kuala Lumpur, Malaysia; 9<sup>th</sup> International Conference in Challenges in Environmental Science and Engineering (CESE), Kaohsiung, Taiwan; 2<sup>nd</sup> International Conference on Advances in Biotechnology, Kuala Lumpur, Malaysia
- Research/Innovation Fund: Research University Individual (RUI): (1001/PREDAC/814272); MTSF Science and Technology Research Grant: (304/PREDAC/6050358/M126)
- Talent Development: 1 master and 1 PhD graduate
- Recognition: Gold Medal, International Malaysia-Indonesia-Thailand Symposium on Innovation and Creativity (iMIT-SIC)

### Industry/ Business Partner/ Level of Impact

- Sustainable Food Security Management
- Knowledge Enhancement
- Wealth Creation
- This New Invention Would Benefit the Bottom Billions, for A Better Crop Yield and Quality Particularly Farmers and Cultivators Who are Facing Interference Due to Climate Change, Season, or Adverse Natural Events.

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