

Anugerah Inovasi Industri – Produk Ternakan

Project Title: Edible Bird's Nest Value-Added Downstream Products

Introduction:

Established on the 12th July 2004 Swiftlet Eco Park Group of Companies consists of Swiftlet Eco Park Holdings Sdn. Bhd and its subsidiaries, which builds the nation first clusters of eco-friendly and strategic Swiftlet Eco Park infrastructure development. Having core business of project developments and sales of swiftlet houses, the provisions of services such as edible-bird's nest (EBN) swiftlet ranching, harvesting, cleaning, processing, research & development, the Group aims to transform and enhance the value creation of the EBN Swiftlet industry, that is capable of sustaining continuous growth of Malaysia in the industry and realize the full potential of manufacturing and export, that will propel the nation's economic development in the future.

Background of the Project:

In the core business of research and development of Edible Bird's Nest, the company has achieved many breakthroughs in the industry. We are the first company to partner with universities to analyse the content of the EBN and first company to develop value added downstream products. By producing our own downstream products, we are propelling towards the direction of the Nation's Economic Transformation Program.

We have also commercialized the value-added downstream products, by having several distribution channels according to the needs of each market respectively. These markets are not limited to Malaysia only, but have extended internationally to India, Dubai, Hong Kong and the latest addition are Amore Pacific and Nong Shim of South Korea.



Whole Range of Value Added Downstream Products produced by Royal Bird's Nest Sdn. Bhd.

Project Issues:

Many swiftlets companies sell only traditional Edible Bird's Nest or Edible Bird's Nest Essence and the majority consumers of Edible Bird's Nest are the Chinese. Therefore, in year 2011, when China banned all imports of Edible Bird's Nest due to the Nitrate content, the whole Bird's Nest Industry in South East Asia faced a major meltdown, including our company and it was especially hard on us, as we are just starting out the business and whereas all our edible bird's nest passed the analysis test. [Certificate 1.1]

Therefore, instead of holding on to edible bird's nest that cannot be exported our directors innovated and started to produce value-added downstream products. These value-added downstream products are added with ingredients that are widely known and consumed by everyone. For example, just to name a few, edible bird's nest with soy, edible bird's nest with Tongkat Ali, edible bird's nest with Coffee. All these new value-added downstream products have further increase the value/price of Edible Bird's Nest in the industry. It has also increase the demand of Edible Bird's Nest and further educate non-consumer to become consumer of Edible Bird's Nest. We are confident of the nutritional value of Edible Bird's Nest as we have done research with University like: International Medical University (IMU) and also University of Tunku Abdul Rahman (UTAR)]. IMU have proven the nutritional value of Edible Bird's Nest [Certificate 1.2 & 1.3] and University of Tunku Abdul Rahman (UTAR) found further nutritional evidence in the study of the protection of human nerve cells.

With our innovation, we have lead others edible bird's nest company to also produce value-added downstream products.



**IMU Research Laboratory
International Medical University**

No. 126, Jalan Perkasa 19, Bukit Jalil,
57000 Kuala Lumpur, Malaysia

Tel: (603) 8656 7228

Fax: (603) 8656 7229

Job Order No.: RL04001/0810

Date of Receipt: 7th June 2010

Report No.: IMU80002/10

Date of Issue: 27th August 2010

Page 1 of 1

CERTIFICATE OF ANALYSIS

Sample Description: Bird Nest (Powder form) 100g
Company: Royal Bird's Nest Sdn. Bhd. (876283-K)
A-13-5, 13th Floor, Block A, Northpoint Offices,
Mid Valley City, No. 1 Medan Syed Putra Utara,
59200 Kuala Lumpur, Malaysia.
Tel No: 03-2284 7850
Fax No: 03-2284 8843

Analysis Method: Cadmium Digestion (Nitrate)
Bradford's Method (Protein)- ISO 17025

ANALYSIS RESULT:

| <u>Parameter</u> | <u>Unit</u> | <u>Result</u> | <u>Maximum permitted level*</u> |
|-----------------------------|--------------------|----------------------|--|
| Nitrate (-NO ₃) | mg/kg | 24 | 50 mg/kg |
| Total Protein | mg/g | 127.35 | - |

*Maximum permitted level: by Malaysia Food Act 1983 (ACT 281) & Regulation 1985
(as at 15th April 2010)

Signature

Quality Manager
Research Laboratory, IMU

This report refers to the tested sample only.

Sampling is not carried out by our organization.

All analysis is carried out to the best of our knowledge and ability.

Our responsibility is limited to the correctness of the results.

This report is issued in the understanding that it does not relieve parties concerned from their contractual obligations.

This report shall not be reproduced except in full without written approval of the laboratory.

Certificate: 1.2



IMU Research Laboratory
International Medical University

No. 126, Jalan Perkasa 19, Bukit Jalil,
57000 Kuala Lumpur, Malaysia
Tel: (603) 8656 7228
Fax: (603) 8656 7229

Job Order No.:RL04001/0710
Date of Receipt:7th June 2010

Report No.:IMU70001/11
Date of Issue:7th January 2011

Page 1 of 2

CERTIFICATE OF ANALYSIS

Sample Description: Bird Nest (Powder form) 100g
Company: Royal Bird's Nest Sdn. Bhd. (876283-K)
A-13-5, 13th Floor, Block A, Norhtpoint Offices,
Mid Valley City, No. 1 Medan Syed Putra Utara,
59200 Kuala Lumpur, Malaysia.
Tel No: 03-2284 7850
Fax No: 03-2284 8843

Analysis Method: High Performance Liquid Chromatography

ANALYSIS RESULT:

| <u>Parameter</u> | <u>Unit</u> | <u>Result</u> | <u>Maximum permitted level</u> |
|------------------------|-------------|---------------|--------------------------------|
| Aspartic acid (as asp) | g/100g | 3.53 | Not specified |
| Serine (as ser) | g/100g | 4.73 | Not specified |
| Glutamic acid (as glu) | g/100g | 2.98 | Not specified |
| Glycine (as gly) | g/100g | 1.96 | Not specified |
| Histidine (as his) | g/100g | 2.10 | Not specified |
| Arginine (as arg) | g/100g | 3.35 | Not specified |
| Threonine (as thr) | g/100g | 3.73 | Not specified |
| Alanine (as ala) | g/100g | 1.28 | Not specified |
| Proline (as pro) | g/100g | 3.70 | Not specified |
| Tyrosine (as tyr) | g/100g | 10.74 | Not specified |

Maximum permitted level: by Malaysia Food Act 1983 (ACT 281)& Regulation 1985
(as at 15th April 2010)

Signature

Technical Manager
Research Laboratory, IMU

This report refers to the tested sample only.
Sampling is not carried out by our organization.
All analysis is carried out to the best of our knowledge and ability.
Our responsibility is limited to the correctness of the results.
This report is issued in the understanding that it does not relieve parties concerned from their contractual obligations.
This report shall not be reproduced except in full without written approval of the laboratory.

Certificate: 1.3



**IMU Research Laboratory
International Medical University**

No. 126, Jalan Perkasa 19, Bukit Jalil,
57000 Kuala Lumpur, Malaysia
Tel: (603) 8656 7228
Fax: (603) 8656 7229

Job Order No.:RL04001/0710
Date of Receipt:7th June 2010

Report No.:IMU70001/11
Date of Issue:7th January 2011

Page 2 of 2

CERTIFICATE OF ANALYSIS

Sample Description: Bird Nest (Powder form) 100g
Company: Royal Bird's Nest Sdn. Bhd. (876283-K)
A-13-5, 13th Floor, Block A, Norhtpoint Offices,
Mid Valley City, No. 1 Medan Syed Putra Utara,
59200 Kuala Lumpur, Malaysia.
Tel No: 03-2284 7850
Fax No: 03-2284 8843

Analysis Method: High Performance Liquid Chromatography

ANALYSIS RESULT:

| Parameter | Unit | Result | Maximum permitted level |
|------------------------|-------------|---------------|--------------------------------|
| Valine (as val) | g/100g | 3.30 | Not specified |
| Lysine (as lys) | g/100g | 1.38 | Not specified |
| Isoleucine (as ile) | g/100g | 1.42 | Not specified |
| Leucine (as leu) | g/100g | 3.16 | Not specified |
| Phenylalanine (as phe) | g/100g | 3.07 | Not specified |
| Tryptophan (as trp) | g/100g | 0.39 | Not specified |
| Cysteine (as cys) | g/100g | 1.60 | Not specified |
| Methionine (as met) | g/100g | 0.42 | Not specified |

Maximum permitted level: by Malaysia Food Act 1983 (ACT 281)& Regulation 1985
(as at 15th April 2010)

Signature

Technical Manager
Research Laboratory, IMU

This report refers to the tested sample only.

Sampling is not carried out by our organization.

All analysis is carried out to the best of our knowledge and ability.

Our responsibility is limited to the correctness of the results.

This report is issued in the understanding that it does not relieve parties concerned from their contractual obligations.

This report shall not be reproduced except in full without written approval of the laboratory.

Project Objective:

By having our own value-added downstream products, (i) we are able to control the value of the raw material instead of being controlled by the largest market (China) and (ii) keep the technology in the country, hence increase the value of Edible Bird's Nest. Besides, it also creates more new jobs in a new field for Malaysians. [Picture: 1.1]

When we are not selling the raw material overseas at a cheap price, and buy it back after process at a very high price, (iii) it can help to increase the overall economy of the country.



Picture: 1.1 Projected jobs by 2020 ETP, Malaysia

Source: http://etp.pemandu.gov.my/Agriculture-@-Agriculture_-_EPP_2-;_Edible_Bird%E2%80%99s_Nest_Swiftlet_Farming.aspx

Before and After Project Innovation:

| Before Project Innovation | After Project Innovation |
|--|--|
| <ol style="list-style-type: none">1. Selling only raw clean to China2. Majority consume by Chinese community only3. Market is really small and controlled by big buyers like China | <ol style="list-style-type: none">1. Increase the value of Edible Bird's Nest more than 10 times2. China is not the major buyer3. Penetrate into Halal market in Bangladesh, Indonesia and Middle East4. Produce various downstream products5. Produce skin care with edible bird's nest, successfully enter Korea market with one of the major manufacturers.6. Widely accepted by all races in Malaysia |

Impact of Project:

With our innovative project, we have increase the value of edible bird's nest, we have change the perception of edible bird's nest from having a shape to shapeless, instead when Royal Bird's Nest produce value-added downstream products, it has become even more marketable, easier to consume as well as more affordable.

As we trust in our researching partners, the various renown Universities in and out of Malaysia, we believe the potential of edible bird's nest will bring the industry to greater heights.

We are looking forward towards Drug Delivery System, Botanical Drugs, Skin Transplant and even medication especially for the Nerve Degenerative Diseases.

Illustration of Before & After:

