

# Modernization of Traditional Apong Production in Sarawak

Implemented By

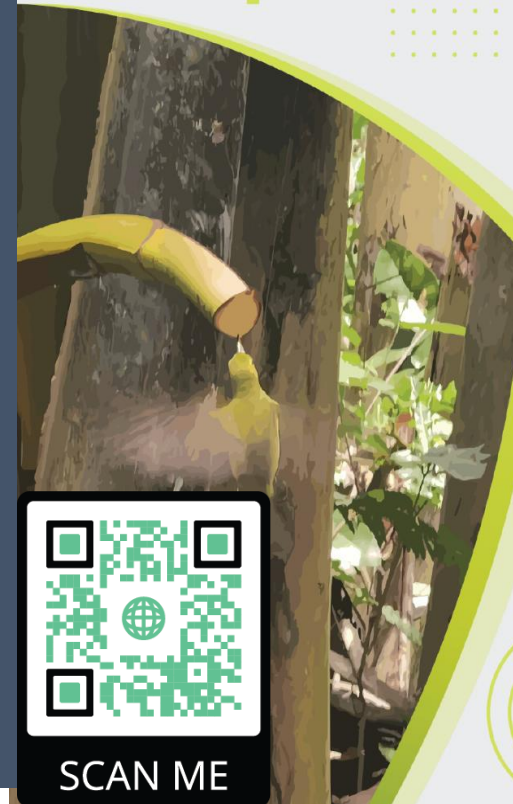
1. KOPERASI APONG SAMARAHAN BERHAD
2. KOPERASI APONG SARIBAS BERHAD

With Cooperation



## ABOUT US

Discover **Borneo Apong Golden Syrup** – an exquisite unrefined sweetener meticulously crafted from pure nypa sap. This golden elixir is not only a delectable source of energy, but also boasts a plethora of remarkable qualities. It is organically derived, making it a guilt-free indulgence. Moreover, its antidiabetic and antioxidant properties contribute to a healthier lifestyle, while its abundance of vitamins and minerals nourish your



**ORDER  
NOW!**

**+ Local Community  
Product**

Produced by

1. Koperasi Apong Samarahan Berhad (KASama)  
Email : apongsamarahan@gmail.com
2. Koperasi Apong Saribas Berhad (KASB)  
Email : apongsaribas.coop@gmail.com

# Table of contents

## 01. About us

---

Modern apong production

## 02. Developed Technologies

---

Innovative technologies for Apong processing

## 03. Modern Setting

---

Apong processing in modern setting

## 04. Scientific Method

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Apong research insights.

## 05. Developed Products

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Innovative, high-quality Apong products.

## 06. Our team

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Introducing our dedicated research team.



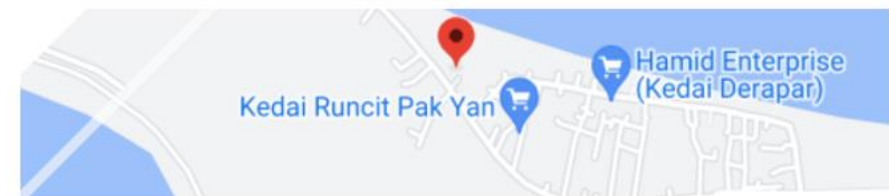
# TRADITIONAL PROCESS OF GULA APONG







## Koperasi Apong Samarahan Berhad (KASAMA)



### Pusat Pemprosesan Apong Samarahan Berhad

Directions

Save

Call

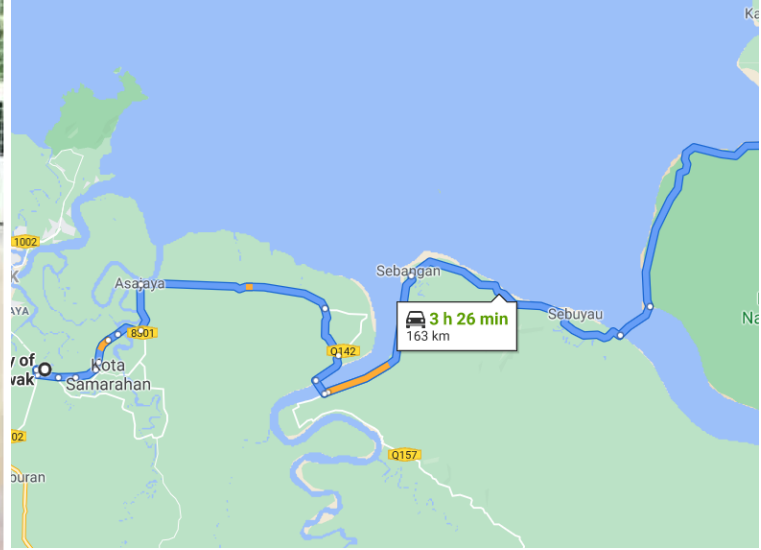
Food processing company in Asajaya

 You manage this Business Profile 

Address: No1 Kampung Tambirat Ulu, 94600 Asajaya







Koperasi Apong Saribas Berhad (KASB)  
No.13C Kpg Hilir Spaoh, 95600, Saribas,  
Betong, Sarawak.

COLLABORATION WITH  
APONG RESEARCH GROUP,  
UNIMAS

2. Developed  
Technologies for  
Apong Industry by  
ARG



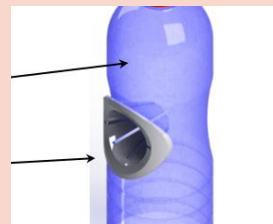
A. Hybrid Apong Stove



B. Apong Preservatives



C. Apong Filtration System



D. SAP Collecting Device

# A. Hybrid Palm Stove (HPS)

## ISSUES

## SOLUTION

### Unhygienic

1. Material used complied with food standard requirements.
2. Suitable to be used indoor.



### Inefficient

Reduce the cooking time up to 40%\*

1. Optimal air supply for complete combustion (Primary & Secondary air inlet)
2. Closed chamber design to reduce heat loss.
3. Convection and conserved heat to increase fuel efficiency.



### Inconsistent quality

- Attached digital control system that can ensure consistent product based on targeted Brix reading.



### Wow factor

- The hybrid heating mechanism efficiently use wood or LPG for fuel.



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## B. Preservative (PI2023004076)

# AQUA PALM SAP PRESERVATIVES

The Aqua Palm Preservative has been extensively tested in laboratory and field conditions, and the results have been impressive. Our product has been shown to effectively delay the fermentation process of nipa palm sap for up to 8 hours, without any adverse effects on its quality or physicochemical properties.

### Problem

Preserved Palm sap



Before  
Pale Yellow Colour

Fermented Palm sap



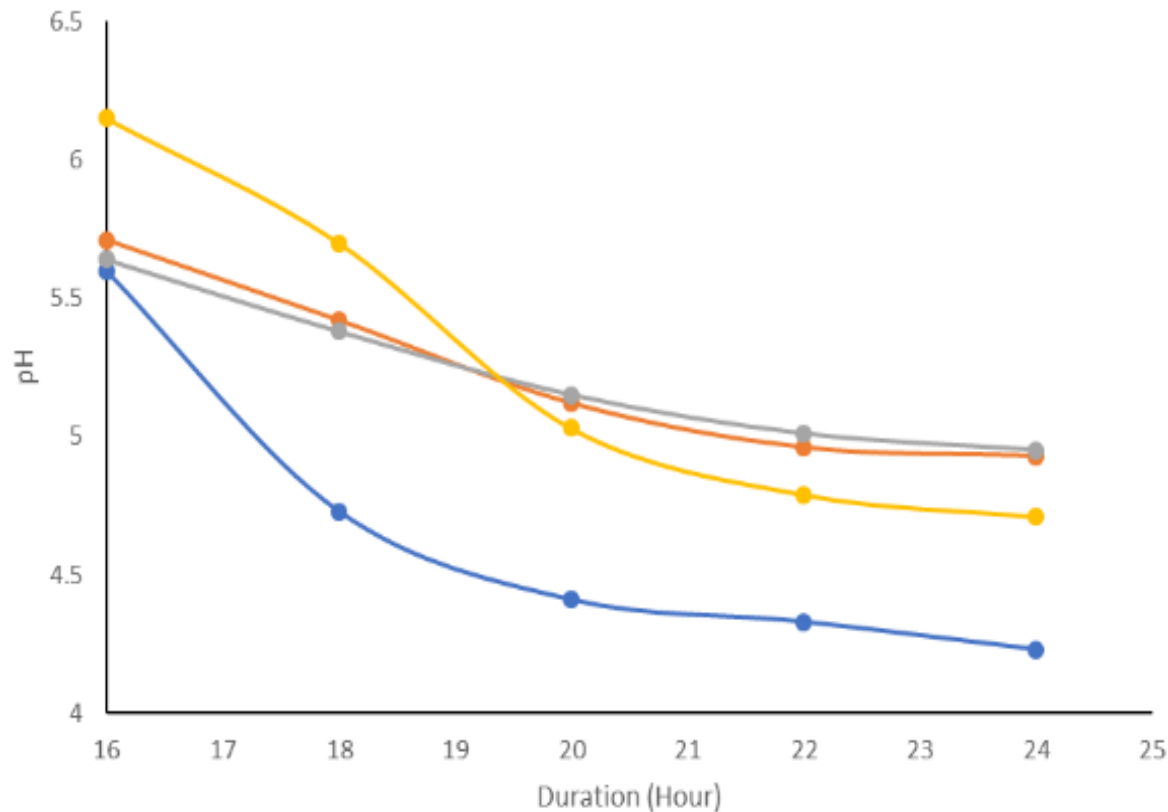
Before  
Cloudy Colour



## B. Preservative

# Impact of Aqua Palm Preservative

pH of Sap Collected With/Out Preservative



**Delay sap fermentation up to 24 hours**

**Extensively tested in lab and field conditions.**

**No adverse effects on quality or physicochemical properties observed.**

**Benefits: Transport nipa palm sap to other locations for further production without spoilage.**

## C. Apong Filtration System



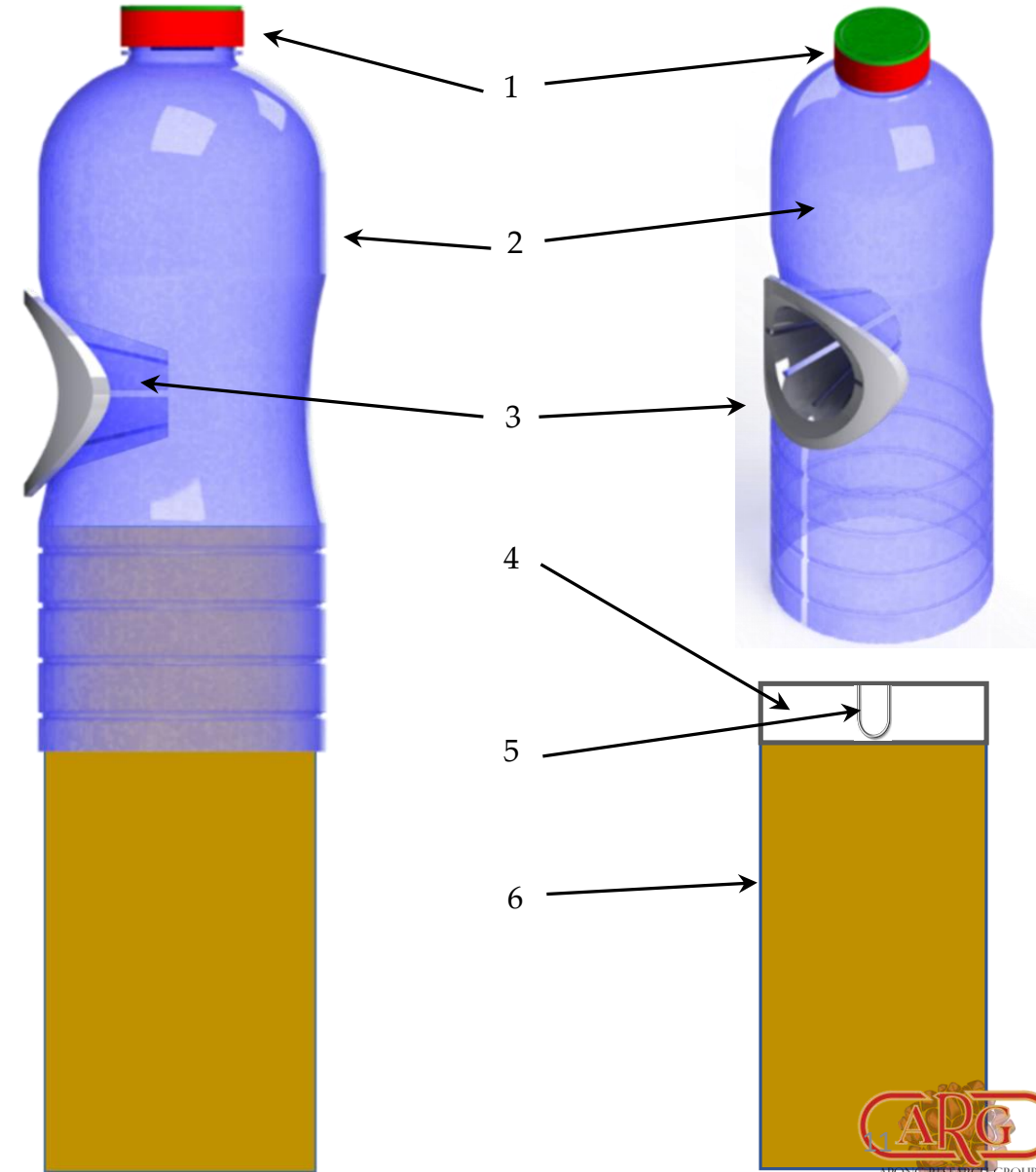
- Filter unwanted dirt and foreign particles
- At the same time preserve the sap nutrient
- 30 litre/ min suitable for SMEs



## D. Apong Sap Collecting Device(PI 2023002798)



- Device For Harvesting Sap From Stalk Or Sapling In Hygienic Manner (PI 2023002798 )
- Improved 97% of sap physical hygiene
- Improved 7-11% of sap chemical purity
- User friendly & low cost device



# 3. Modernization of Traditional Apong Production Setting

© AR2022Q02959

Hygienic Process





# 4. Development of scientific method to support the industry

## 1. Local Built Solution

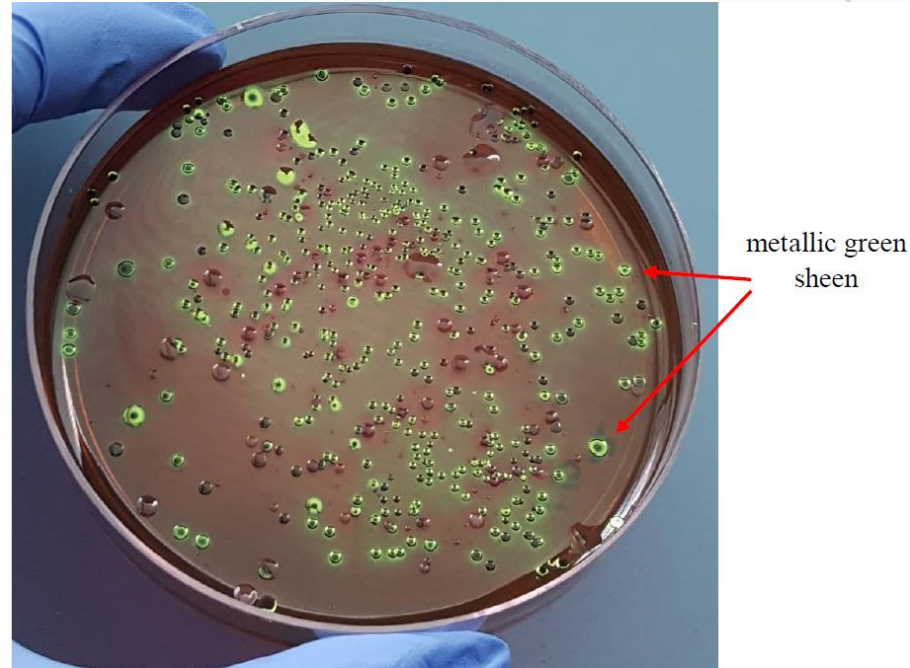
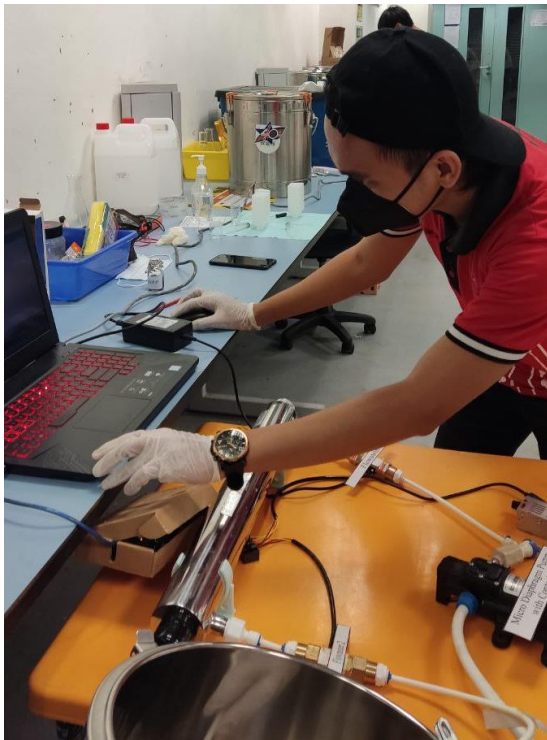
- Thorough design process



# 4. Development of scientific method to support the industry

## 2. Reliable

-Testing using digital technologies



Clear metallic green sheen can be seen forming by the bacterial colonies grown on EMB selective agar. This indicates the presence of *E. coli* in the samples and potential contamination of the samples by fecal coliform.





# 5. Developed Apong Products

## 3. Apong Base

1. Borneo Apong Golden Syrup
2. Borneo Apong Coklad
3. Borneo Apong Spread







**No**  
Added Sugar

## Delicious Borneo Apong Golden Syrup

PRODUCT BY  
BORNEO COMMUNITY

UNIMAS Apong Research Group



**PURE**  
Apong  
Syrup

### Borneo Apong Golden Syrup

Nutrition Information		
Serving Size : 10ml (5g)		Serving per Package : 40
Average Composition	Per 100g	Per 5g
Energy, kcal (kJ)	261 (1090)	13 (55)
Fat, g	0.0	0.0
Protein, g	1.1	0.0
Carbohydrate, g	63.9	3.2
Total Sugar, g	57.5	2.9
Sodium, mg	244	12.2

Get creative and explore the many ways Nypa Palm Syrup can enhance your culinary creations. Its versatility and unique flavor will surely impress your taste buds.

### + What Makes It So Special

Discover the irresistible allure of Borneo Apong Golden Syrup, derived from the majestic Nypa palm tree. Here's why it stands out:

- 1. Exquisite Flavor:** Immerse your senses in a delightful symphony of caramel, molasses, and nutty notes. Each drop offers a velvety texture and captivating taste that indulges and satisfies.
- 2. Pure and Trustworthy:** Crafted using modern methods, Nypa Palm Syrup retains its natural goodness, free from artificial sweeteners. It's a reliable sweetener straight from nature's pantry.
- 3. Endless Culinary Possibilities:** From sweet to savory, Nypa Palm Syrup adapts effortlessly, elevating your dishes to extraordinary heights. Unleash your creativity and unlock new flavors.

### What Can Be Done

Here are some simple yet delightful ways to enjoy it:

- 1. Sweet Delights:** Drizzle over pancakes, waffles, or desserts for a natural and delicious sweetness.
- 2. Savory Enhancements:** Use it to create mouthwatering sauces, glazes, and marinades for grilled meats, roasted veggies, or stir-fries.
- 3. Beverage Infusion:** Stir into hot or cold beverages like coffee, tea, lemonade, or cocktails for a tropical twist.

### Our Apong Products

1

#### Apong Choklad

Savor Apong's homemade chocolate, made with a delightful combination of chocolate compound, nypa palm syrup, butter, vanilla, and fresh cream. This irresistible treat offers a harmonious blend of flavors and a smooth, creamy texture.

It not only satisfies your sweet cravings but also provides a quick energy boost. Indulge in the pure pleasure of Apong's homemade chocolate, crafted with care and perfect for any occasion.

2

#### Apong Spread

Savor the delightful taste of Apong Spread, a delectable combination of premium ingredients. Made with Nypa Palm Syrup, butter, vanilla, and fresh cream, this spread offers a tantalizing experience.

Spread it generously on toast, croissants, or pastries for a moment of pure indulgence. Enjoy the mouthwatering goodness of Apong Spread and elevate your breakfast or snack time with its irresistible flavor.

**SAVOUR  
SWEET  
DELIGHTS**





# Borneo Apong Salt

Nypa salt or “Garam Apong” is one of local salt that is popular among locals for its health benefit. Commercializing the Nypa salt would be great advantage to the local since the Nypa stalk is one of the waste products that should be utilize as a source of income.

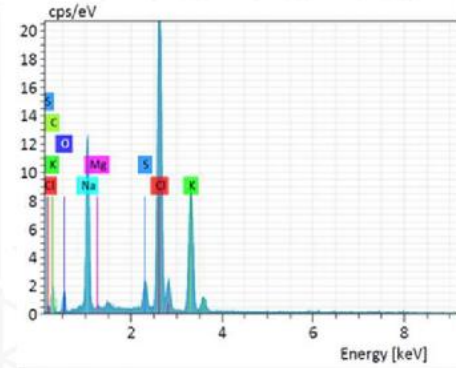
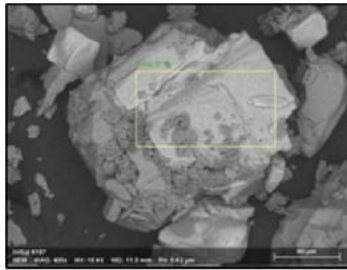
Commercializing the garam apong globally apart from possibility of garam apong application as health and beauty products.



# Nypa Salt Content

Nypa salt content is similar to Himalayan salt (coarse) which shows it content sodium chloride, Magnesium and potassium which indicates that it has the mineral content at par with the sought-after Himalayan salt.

Nypa salt



Himalayan salt (Coarse)

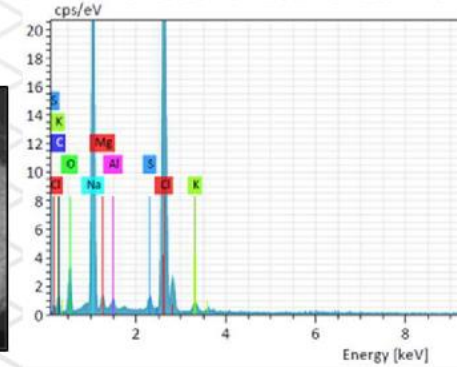
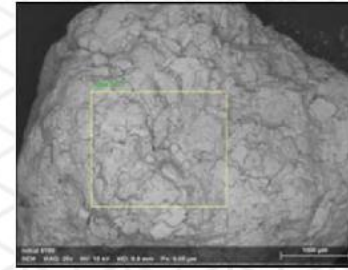
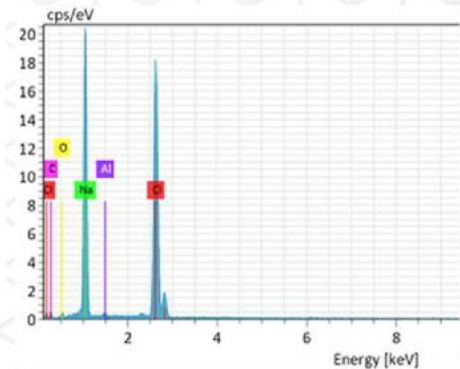
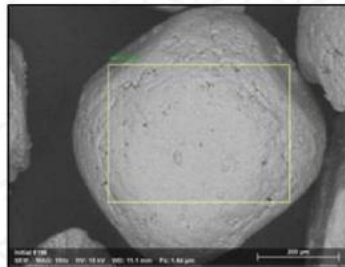
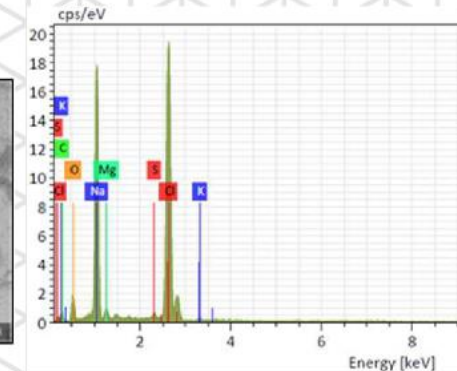
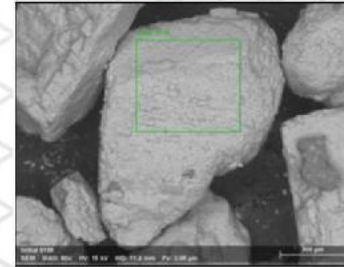


Table salt



Himalayan salt (Fine)



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UNIMAS Holding Sdn Bhd



*Sustainable Agro Community*

