

**Stock Code : 4148**



# All Cosmos Bio-Tech Holding Corporation

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[www.allcosmos.com](http://www.allcosmos.com)

# Disclaimer

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司

These presentations and discussions contain certain forward-looking statements with respects to the results of operation, financial condition and current expectation about future events. By their nature, forward-looking statements involve risk and uncertainty because they relate to events and depend on circumstances that will occur in the future.

We undertake no obligation to publicly update or revise any forward looking statements whether as a result of new information, future events or otherwise. The actual result could differ materially from those anticipated in these forward looking statements.

**全宇生技**

**ALL COSMOS BIO-TECH**

Holding Corporation

AgriCultural Innovation

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# Outline

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1. **Company Profile**
2. **Operational Overview**
3. **Industry Overview**
4. **Growth & Development**
5. **2019 Q3 Financial Report**



- (1) Introduction
- (2) Milestone
- (3) Structure
- (4) Principal Business Plant

# Company Introduction

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司

**Established on**  
March 2010

**Group Chairman and CEO**  
Dato' Tony Peng  
Shih Hao

**Paid-up Capital**  
NTD 640,000 Thousand



## **Main Products**

- Microbial Research & Development and Production
- Organic Compound Fertilizer and Biochemical Organic Compound Fertilizer with Effective Microorganisms

**No of Employees (Group)**  
371

**Main Operations Base**  
Johor State and Sabah State in  
Malaysia



# Milestone

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司



1999

All Cosmos Industries Sdn Bhd (ACI) Established



2008

Collaborate with Malaysian Palm Oil Board (MPOB) to develop MPOB F4 Biochemical Compound Fertilizer



2009

Set up R&D Center and Build Nitrogen-Fixing Bacteria Production Platform



2010

All Cosmos Bio-Tech Holding Corp. (ACBT) & Sabah Softwoods Hybrid Fertilizer (SSFH) Incorporated



# Milestone

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司



2011

Appointed by the Ministry of Science, Technology & Innovation (MOSTI) as Agricultural Green Technology Advisors



2012

Develop 4 in 1 Biochemical Compound Fertilizer, Gano EF for Ganoderma Disease



2014

ACI West Malaysia Second Plant Set up in Johor



2016

Obtained Taiwan Patent for Bio-Stabilized Fertilizer



2019

Develop Lignocellulose Hydrolysis Technology with ITRI

# Group Structure

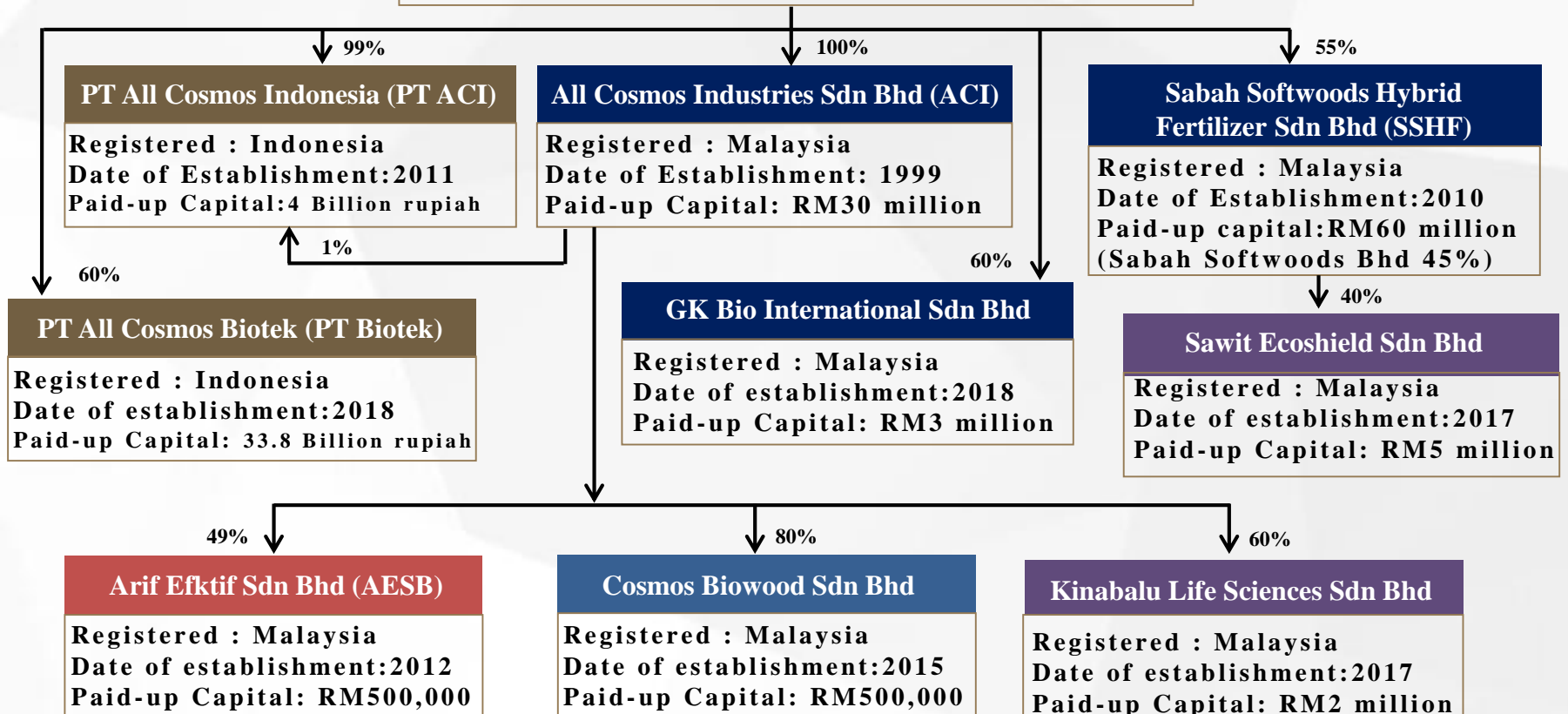
All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司

## All Cosmos Bio-Tech Holding Corporation (ACBT)

Listed : Taiwan Stock Exchange (Stock Code 4148)

Date of Establishment: 2010

Paid-up capital: NTD 640 million





# Principal Business Plant

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司



**ACI West Malaysia Plant 1**  
(2001 completed)  
Area: 1.953 hectares  
Capacity: 115,000 tons



**ACI West Malaysia Plant 2**  
(2014 completed)  
Area: 3.826 hectares  
Capacity: 135,000 tons



**SSHF East Malaysia Plant**  
(2013 completed)  
Area: 3.642 hectares  
Capacity: 100,000 tons

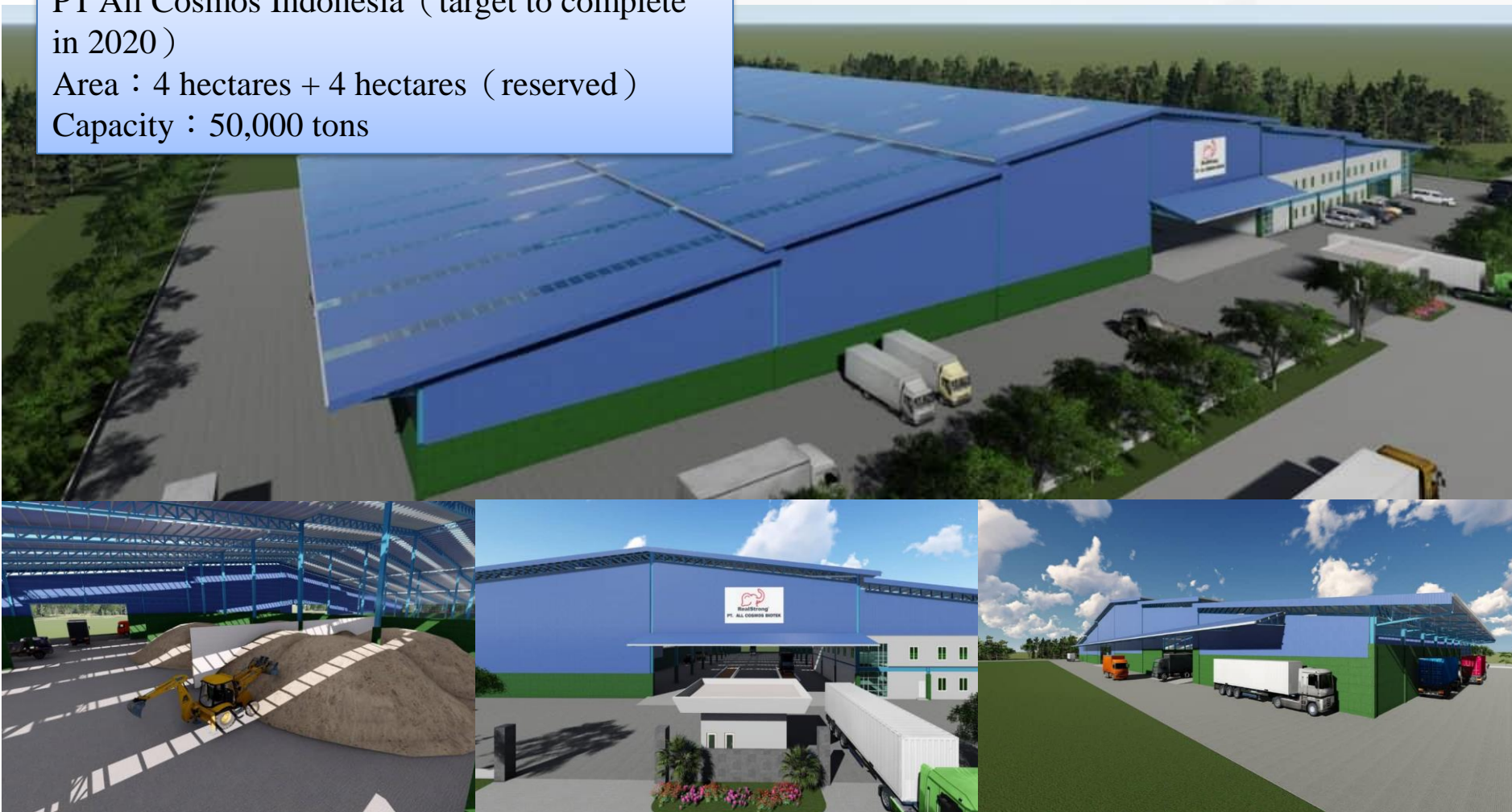
# Principal Business Plant

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司

PT All Cosmos Indonesia (target to complete in 2020)

Area : 4 hectares + 4 hectares (reserved)

Capacity : 50,000 tons



### 3. Operational Overview

- (1) Products and Application
- (2) Product Combination Ratio
- (3) Major Customers
- (4) Production Process

MYANMAR

TAIWAN

PHILIPPINES

CAMBODIA

VIETNAM

MALAYSIA

SABAH  
( EAST MALAYSIA )

INDONESIA

SINGAPORE

# Types of Fertilizers

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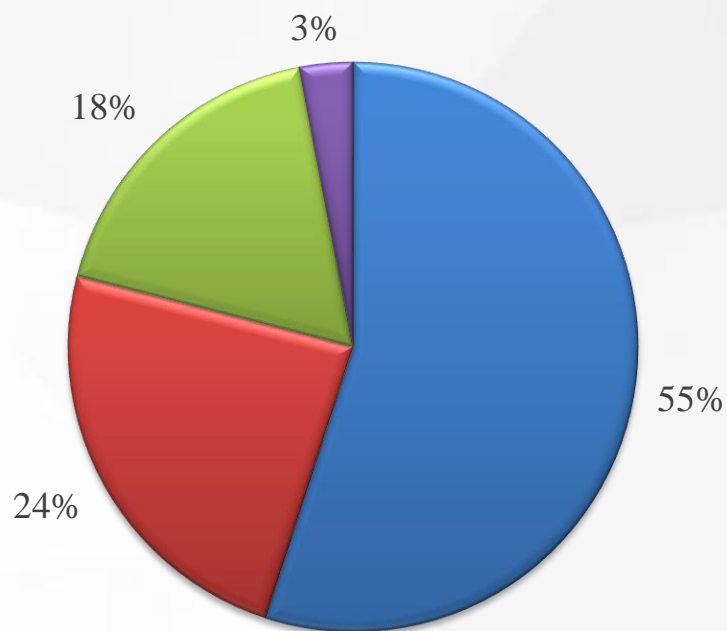
Types	Straights Fertilizers	Chemical Mixture	Chemical Compound Fertilizer	3 in 1 Bio Chemical Compound	4 in 1 Bio Control Bio Chemical Compound
Description	Containing only a single chemical element	Mixture of Two or more chemical elements	Granulation of Mixture of Two or more chemical elements	Adding organic matter with micro-organisms to chemical elements	Adding bio-control bacteria to Bio chemical compound fertilizer
Advantages and disadvantages	<ul style="list-style-type: none"> <li>● Use accordingly to the crop conditions</li> <li>● High labour cost due to need frequent manuring application</li> </ul>	<ul style="list-style-type: none"> <li>● Lower Production costs, Lower Manuring Frequency</li> <li>● Uneven distribution of nutrients, loss of volatile easily</li> </ul>	<ul style="list-style-type: none"> <li>● The nutrients contained evenly and stable</li> <li>● Long-term usage cause environmental pollution</li> </ul>	<ul style="list-style-type: none"> <li>● Combination of the advantages of chemical and organic fertilizer</li> <li>● Higher Technique and Manufacturing Technology</li> </ul>	<ul style="list-style-type: none"> <li>● Additional disease-resistant function</li> <li>● Higher production costs and selling price</li> </ul>



# Product Combination Ratio

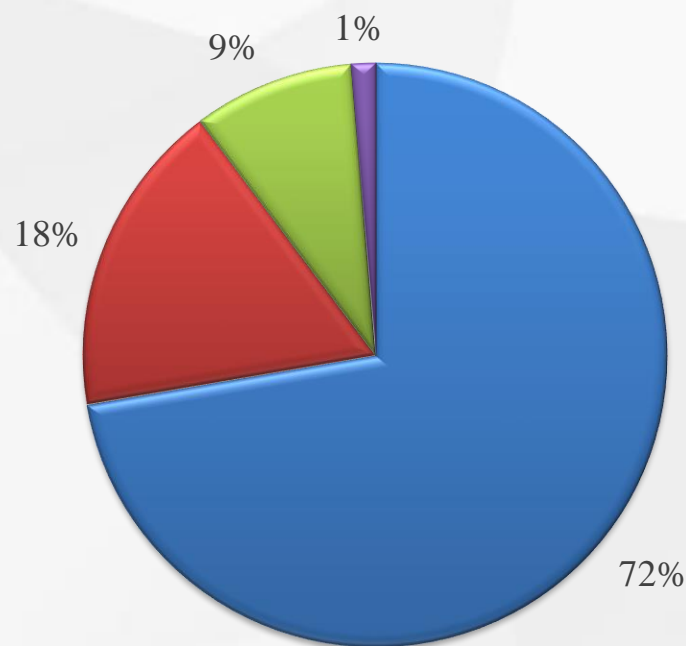
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## 2019 Q1~Q3



- Organic Compound Fertilizer
- Biochemical Organic Compound Fertilizer
- Chemical Fertilizer
- Microorganisms

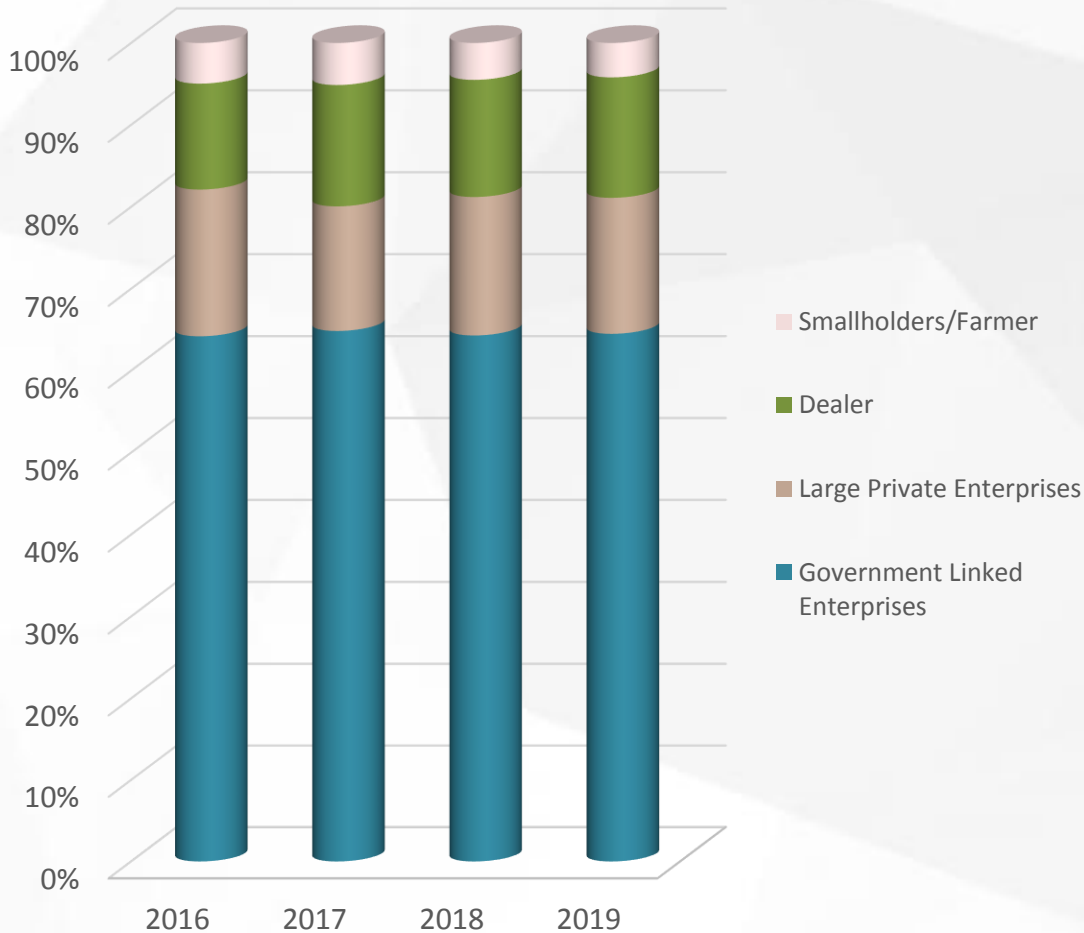
## 2018 Q1~Q3



- Organic Compound Fertilizer
- Biochemical Organic Compound Fertilizer
- Chemical Fertilizer
- Microorganisms

# Key Customer

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## Government Linked Enterprises



YPJ HOLDINGS SDN BHD  
(Company No. 382400-P)



## Private Enterprises



JAYA



TIASA



# Microbial Production Process

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**Selection**



**Activation**



**Cultivation**



**Scaling Up - 5L - 50L - 500L**



# Fertilizer Production Process

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## Raw Material



## Fermentation



## Processing Machine



## End Product



## Quality Control



## Control Panel







### 3. Industry Overview

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- (1) Oil Palm Industry
- (2) Problems in Oil Palm
- (3) Prevention of Ganoderma Disease



# Oil Palm Industry

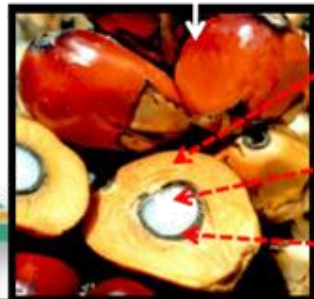
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## Oil Palm Fruit Introduction



### Basic Information 基本資料

- Fruits per bunch: 1000 to 3000
- Bunch Weight: 15 – 25kg
- Fruit size: 5 cm
- Fruit shape: Oval
- Fruit Color: Yellowish red
- Fruitlet weight: 10 grams
- Oil per bunch: 23 – 25%



Mesocarp: crude palm oil

Palm kernel: crude palm kernel oil

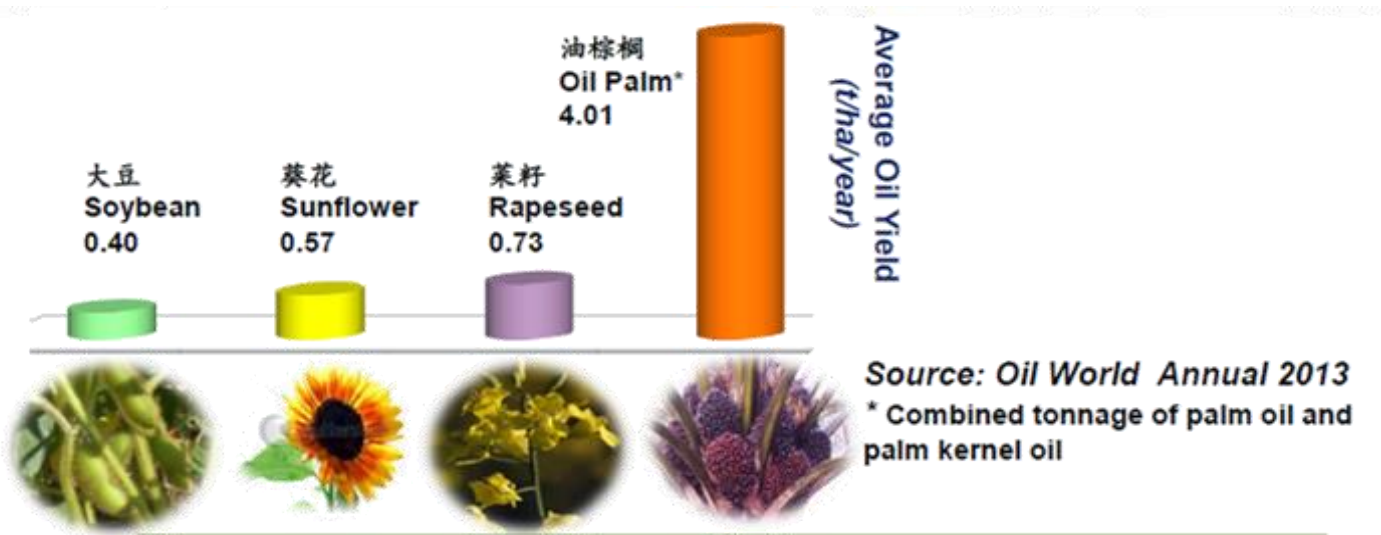
Shell



# Oil Palm Industry

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## Oil Palm - The Most Productive Oil Crop



Oil Crops	Production (Mn T)	% of total production	Total area (Mn Ha)	% of total area
Oil palm*	59.39	42.3	14.8	8.3
Soybean	41.8	29.8	103.8	58.4
Rapeseed	24.4	17.4	33.3	18.7
Sunflower	14.8	10.5	25.9	14.6

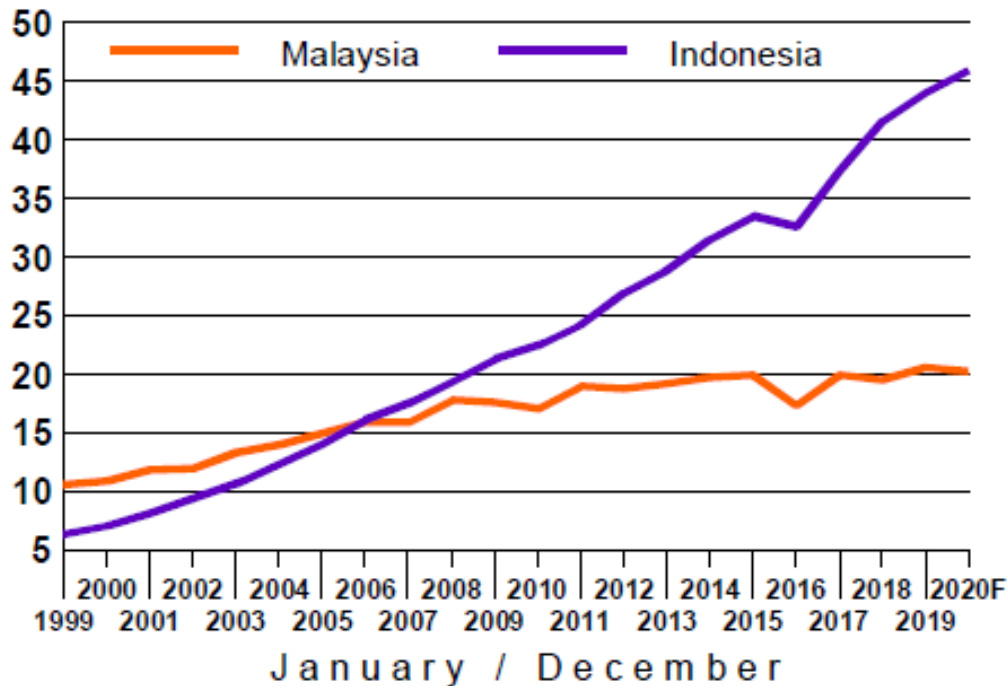


MALAYSIAN PALM OIL BOARD · 马来西亚棕榈油总署

# Oil Palm Industry

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**PALM OIL : Production in Key Countries (Mn T)**



- Indonesia and Malaysia are key planting countries of oil palm
- Expecting slow down in production growth in 2020

Source: Oil Word . 2019/9/27

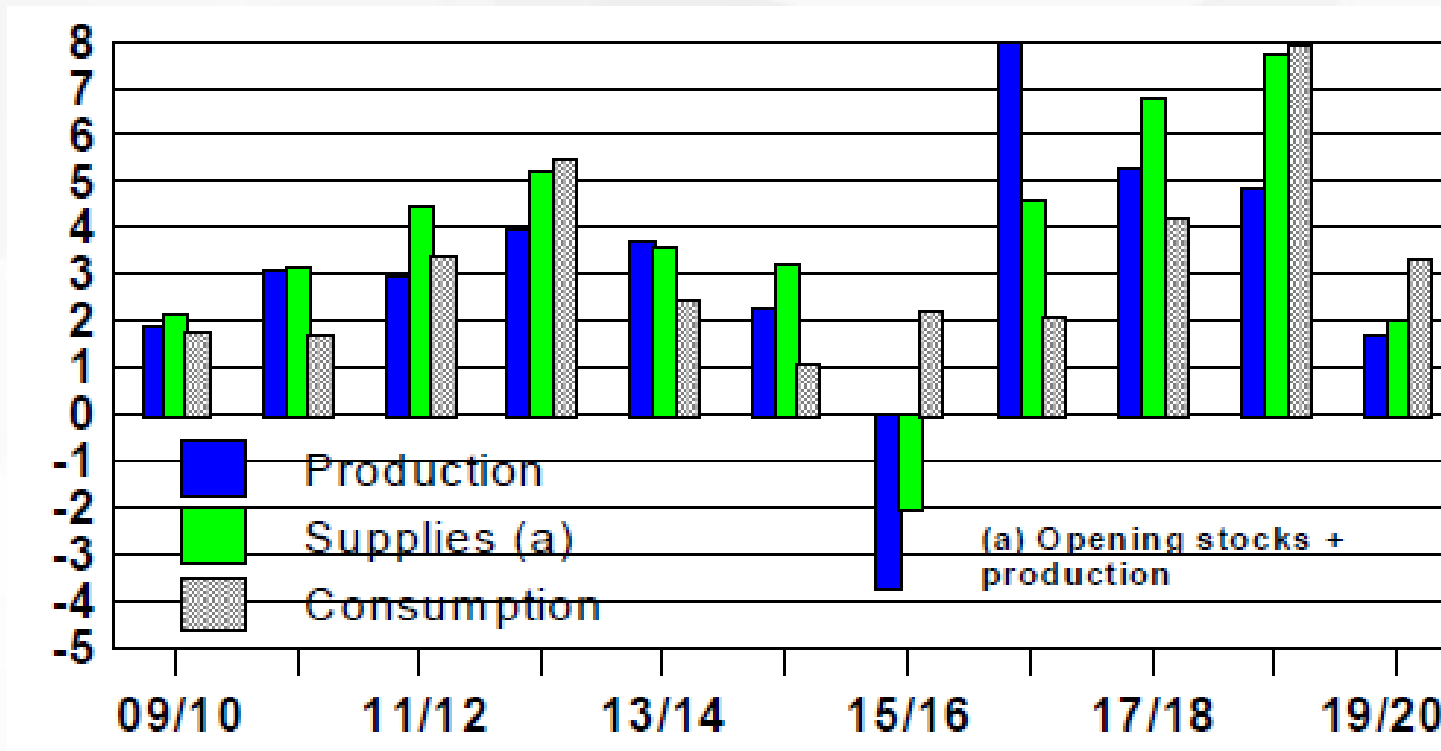


# Oil Palm Industry

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## World Consumptions and Supplies

Unit: Mn T

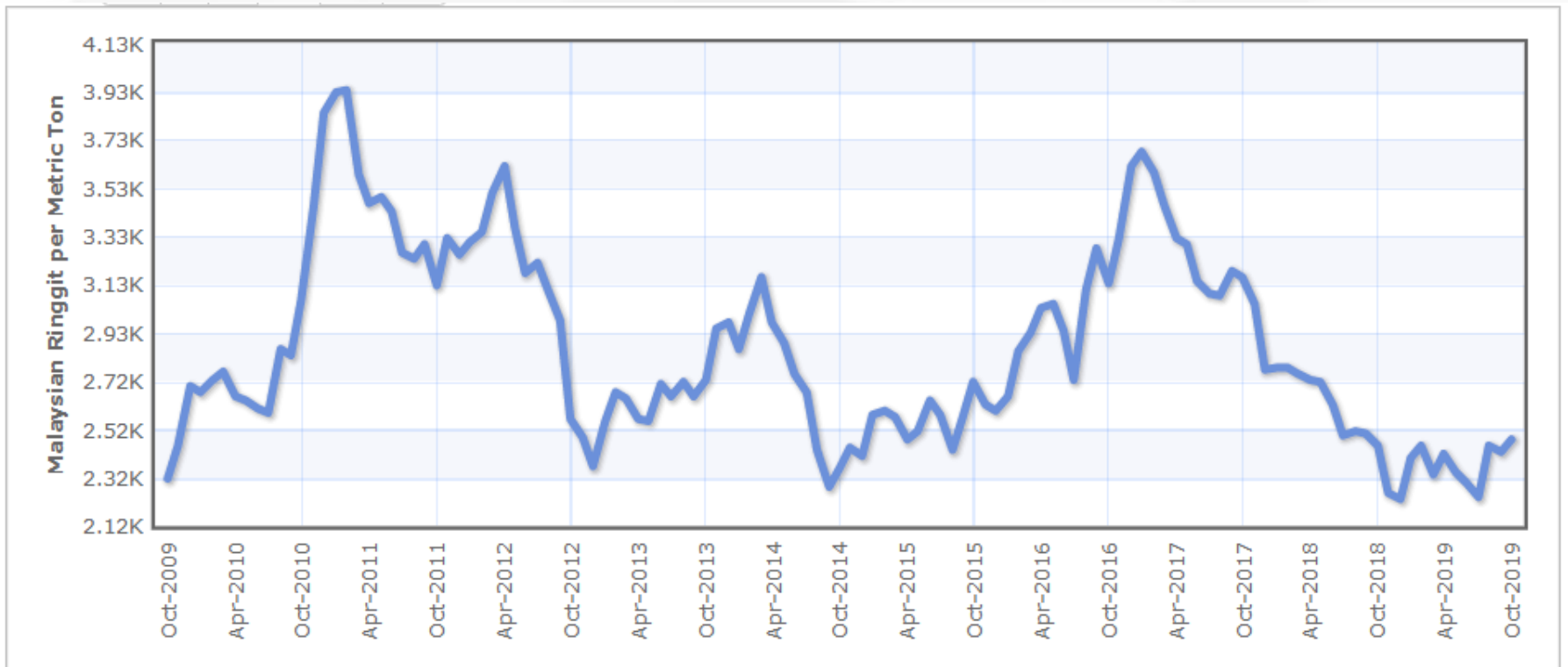


Source: Oil Word . 2019/9/27

- Supply & demand close to balance in 2019 to 2020, with expected production of 78.6 million tons and consumption of 80 to 81 million tons

# 2009 ~ 2019 CPO Price

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# Various Problems In Oil Palm

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**Species / Breed**



**Soil / Water**



**Weather**



**Plantation Management /  
Manpower Issues**



**Fertilizer**



**Pest & Disease Control**



# Ganoderma Disease

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# STATUS OF *Ganoderma* DISEASE IN OIL PALM ESTATES in Malaysia (Idris et al., 2011; PIPOC)

Total no. of estates contacted: 2,355.

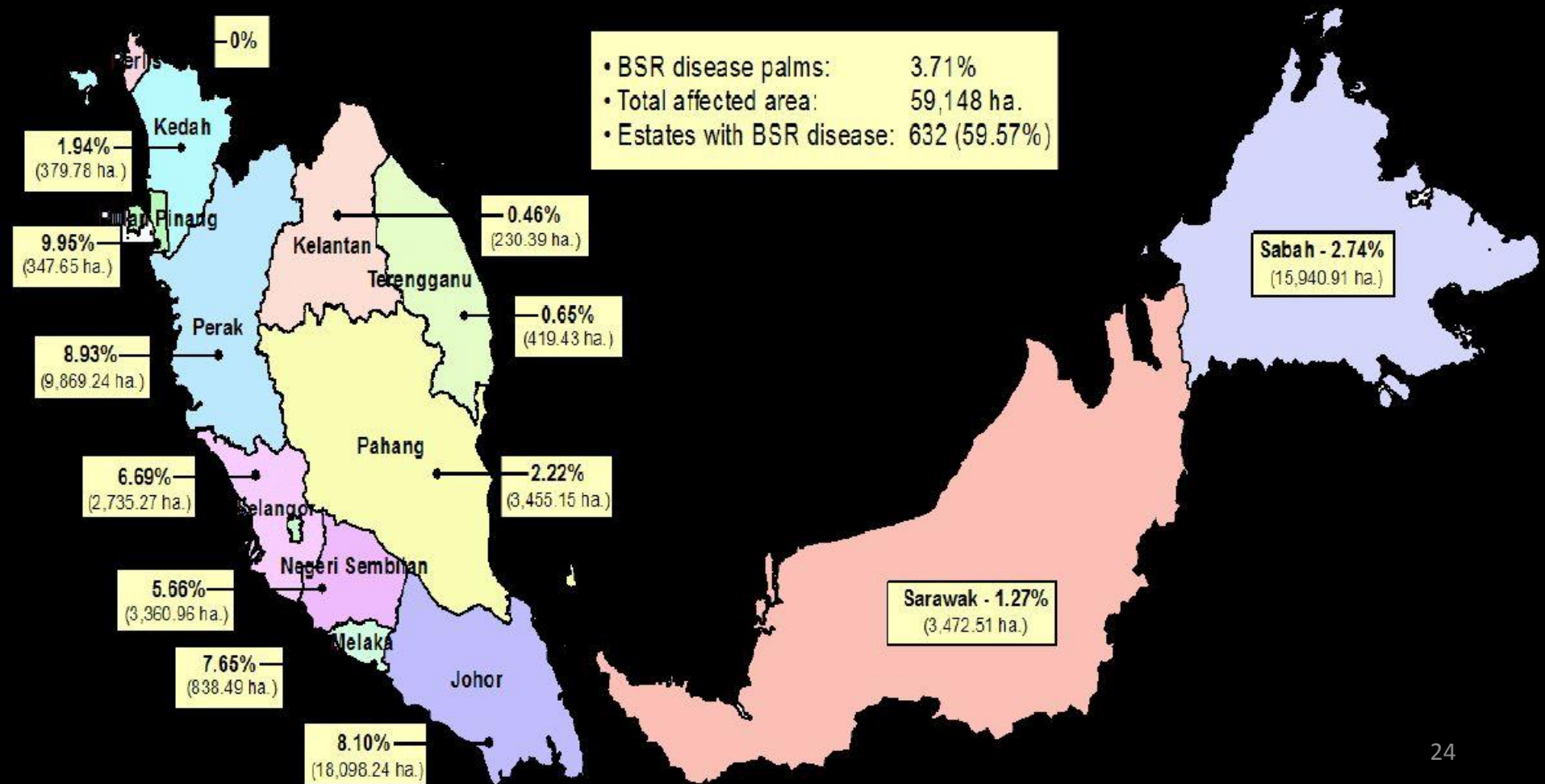
**BSR disease palms: 3.71%**

No. of estates responded: 1061 (45.0%).

**Total affected areas: 59,148 ha.**

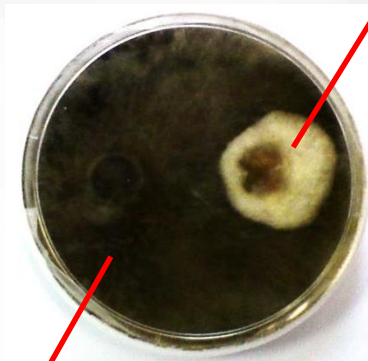
Total areas responded: 1.594 million ha.

**Estimated losses : RM 1.5 billion**



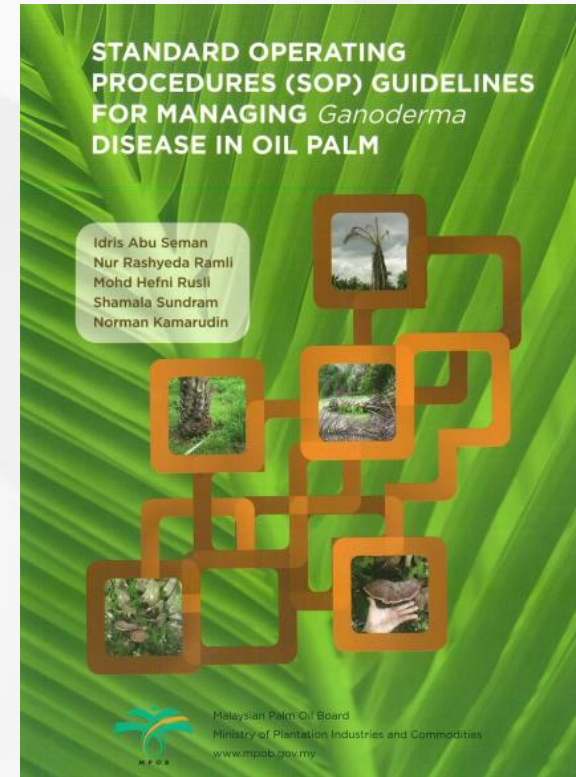
# Ganoderma Disease Prevention

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Ganoderma

Hendersonia



SOP Guidelines for Managing *Ganoderma* Disease in Oil Palm  
- published by MPOB on July 2016



## 4. Growth & Development

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- (1) Operational growth
- (2) Circular Economy
- (3) Biotechnology Development
- (4) Plans



# Operational Growth

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## **Main Customers :**

- Government linked company, large private plantation
- Selling with own brand “RealStrong”
- Divide into standard sales, project sales and marketing

## **Main Market:**

- Malaysia is accounted for about 90%, while the rest are exported to the Philippines, Indonesia and Vietnam
- Mainly for oil palm, fruit, rubber, rice and other crops

## **New Market:**

- Become Malaysian government’s rice microbial subsidy supplier

# Operational Growth

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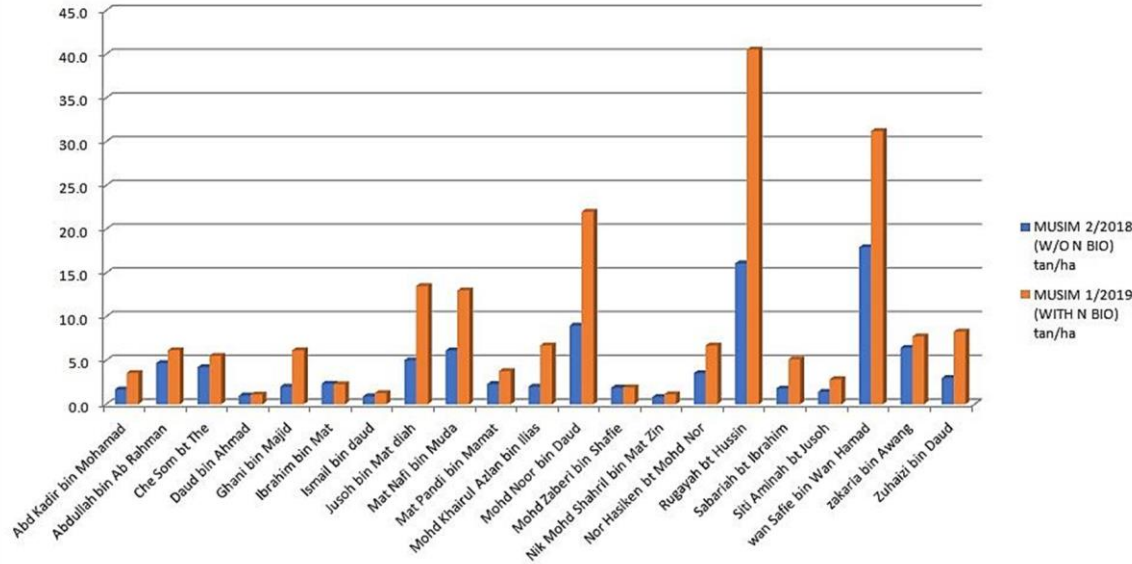


N-bio booster



# Operational Growth

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N-bio booster improves production by 12%-20%



# Sustainable Waste Management

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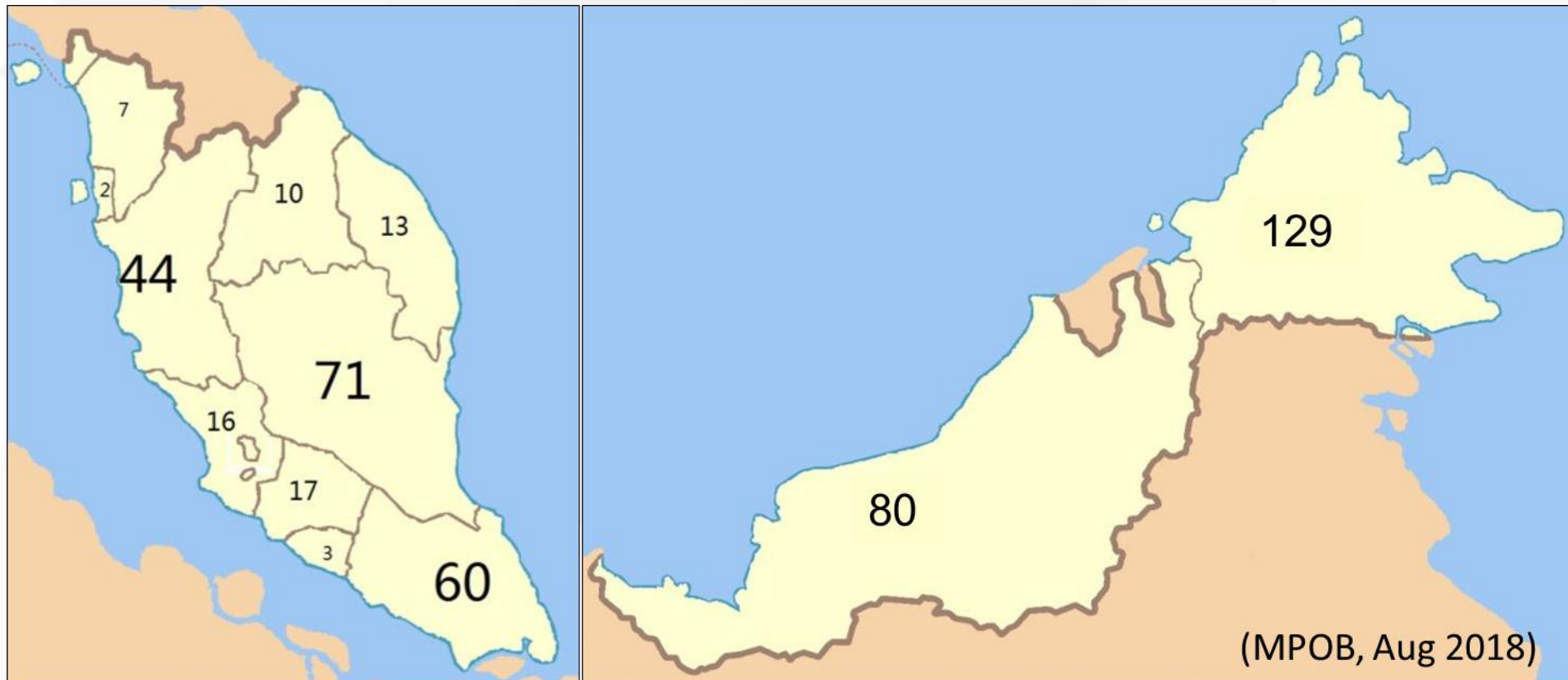


# Malaysia Oil Mill Map

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司

Malaysia has a total of 453 Palm Oil Mill , all over 12 states

West Malaysia : 244      East Malaysia : 209

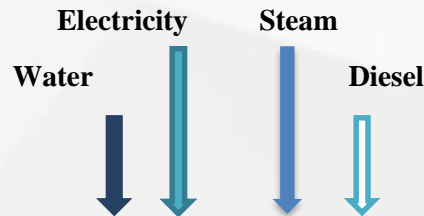


# Palm Oil Mill Material Flowchart

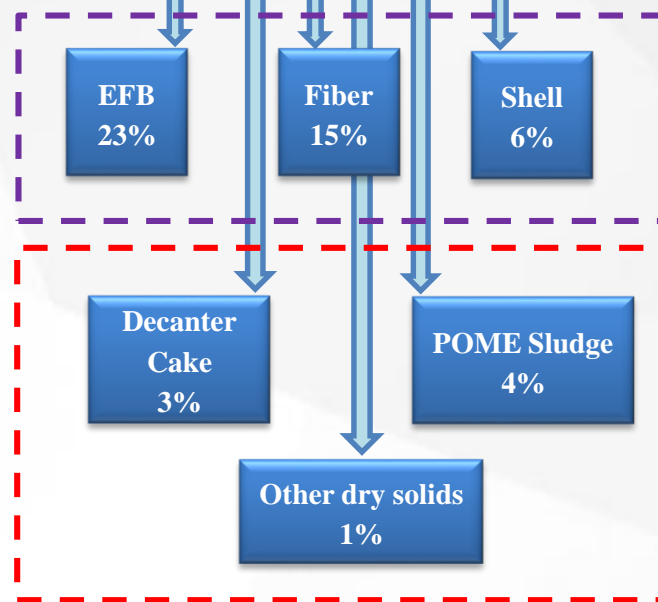
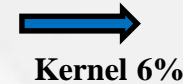
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**RAW MATERIAL**



**PRODUCTS**



**Common Uses:**  
 EFB: Mulching, mattress filler, furniture  
 Fiber: Boiler fuel, furniture  
 Shell: Animal feed, boiler fuel



**Re-utilization Strategy:**  
 Step 1: Production of Trichoderma spores  
 Step 2: Drying of waste to 25 - 30% moisture  
 Step 3: Cooling of dried waste  
 Step 4: Inoculation of Trichoderma into waste  
 Step 5: Packaging of Trichoderma solids



# Palm Oil Mill Sustainability

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- Produce **Sawit Shield** using decanter cake from oil mill and use for combating Ganoderma disease in Sawit Estate

# Palm Oil Mill

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First Palm oil mill started operation in September 2019



# Biotechnology Growth

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## 2015

Bio Control, Bio  
Chemical Compound  
Fertilizer



## 2020

Second generation sugar





# Biotechnology Development

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## Material



**Beet**



**Sugar Cane**

First generation



**Sugar**

## Material



**Empty fruit bunch**

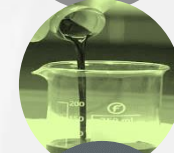


**Sawdust**

Second generation



**Lignin**



**Glucose**



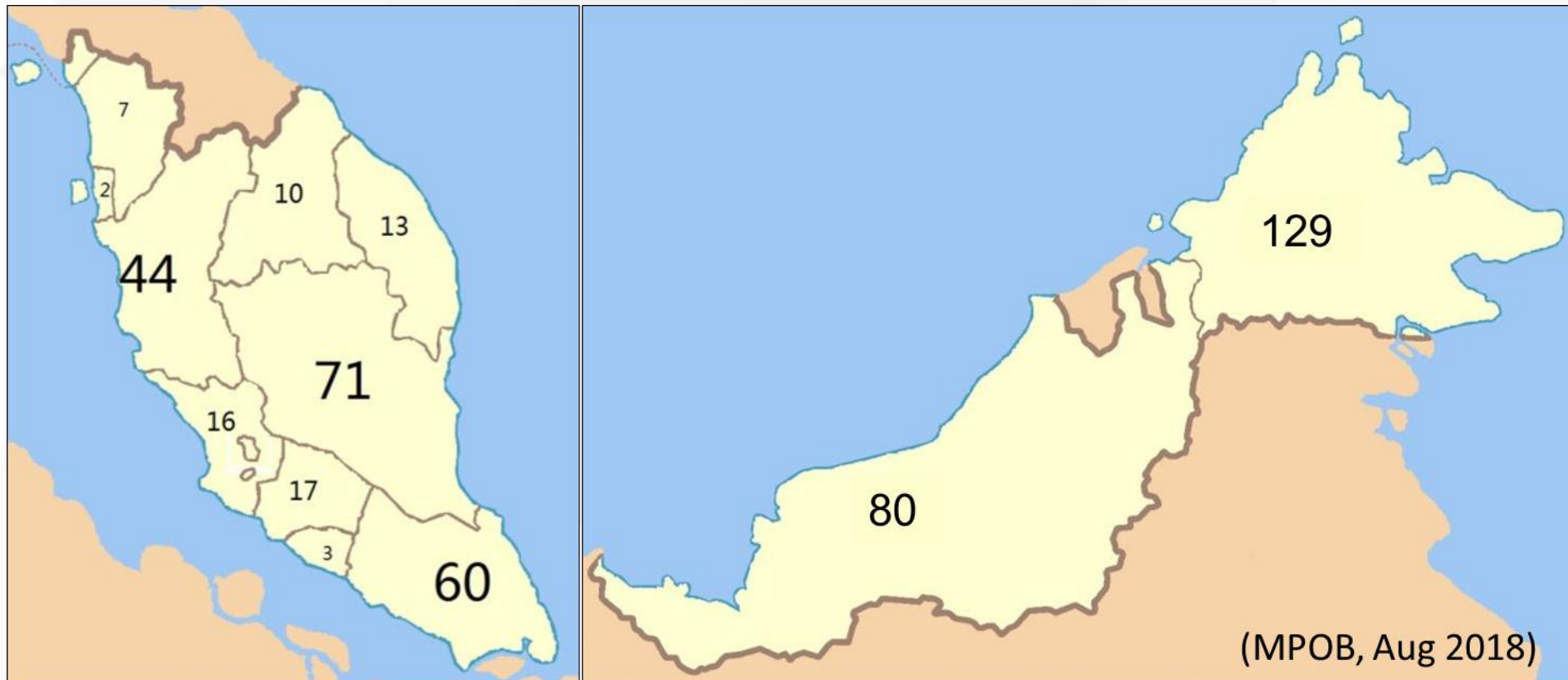
**Xylose**

# Potential Sugar Valley

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司

Malaysia has a total of 453 Palm Oil Mill , all over 12 states

West Malaysia : 244      East Malaysia : 209



# Potential Sugar Valley

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司



Lignin



Second generation sugar



VEDAN



## Products

Bio Lysine

PLA

Isobutanol

BDO  
(1,4-butanediol)

Bio Lysine

Lignosulfonates



# Plans

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**Biotechnology**

**Green Agriculture**

**South East Asia  
Pioneer**

**Recycling &  
Sustainability**



**Eco-Friendly**



5. 2019Q3  
Financial  
Reports

# Consolidated Income Statement

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司

Item	2019 Q3 NTD\$,000	%	2018 Q3 NTD\$,000	%
Sales revenue	453,122	100	761,281	100
Cost of goods sold	(361,268)	(80)	(537,143)	(71)
Margin	91,854	20	224,138	29
Operating expenses	(73,397)	(16)	(132,755)	(17)
Operating profit	18,457	4	91,383	12
Non operating income & expenses	14,661	3	19,322	3
Profit before income tax	33,118	7	110,705	15
Income tax expenses	(28,781)	(6)	(11,584)	(2)
Profit after tax	4,337	1	99,121	13
EPS	0.10		1.43	



# Consolidated Income Statement

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司

Item	2019 Q1~Q3 NTD\$,000	%	2018 Q1~Q3 NTD\$,000	%
Sales revenue	1,395,472	100	2,216,898	100
Cost of goods sold	(1,085,676)	(78)	(1,558,000)	(70)
Margin	309,796	22	658,898	30
Operating expenses	(256,487)	(18)	(330,739)	(15)
Operating profit	53,309	4	328,159	15
Non operating income & expenses	26,322	2	31,830	1
Profit before income tax	79,631	6	359,989	16
Income tax expenses	(42,198)	(3)	(41,420)	(2)
Profit after tax	37,433	3	318,569	14
EPS	0.54		4.33	

# Consolidated Balance Sheet

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司

新台幣仟元

項目	2019.09.30	2018.09.30	YoY (\$)
Cash & financial assets	820,455	668,959	151,496
Account receivable	518,232	1,034,880	(516,648)
Inventory	308,619	541,706	(233,087)
Other non current asset	118,369	86,803	31,566
Non current asset	839,053	759,104	79,949
Total asset	2,604,728	3,091,452	(486,724)
Short-term loan	-	267,325	(267,325)
Accounts payable	98,749	210,735	(111,986)
Other non current liabilities	29,262	61,632	(32,370)
Non current liabilities	35,707	61,302	(25,595)
Total liabilities	163,718	600,994	(437,276)
Total equities	2,441,010	2,490,458	(494,448)



Q & A



4 IN 1

RealStrong®

# GanoEF

Biofertilizer

## Mengandungi/Contains

Kulat endofitik untuk kawalan penyakit Ganoderma

Endophytic fungus for control of Ganoderma disease

Bahan organik  
Organic matters

Nutrien NPK  
NPK nutrients

Mikroorganisma bermanfaat  
Effective microorganisms

Jointly developed by:



Dikilang oleh/Manufactured by:

ALL COSMOS INDUSTRIES SDN. BHD. Co. No. 487874-D

PLD 539, Jalan Keluli, Pasir Gudang Industrial Estate, 81700 Pasir Gudang, Johor, Malaysia.

Tel: +607-252 3788 Fax: +607-251 2588

Website: www.allcosmos.com

Dirumuskan oleh/in collaboration with:  
Malaysia Palm Oil Board

PATENT NO. PI2011005782

6, Persiaran Institut, Bandar Baru Bangi, 43000 Kajang, Selangor, P.O. Box 10620, 50720 Kuala Lumpur

2019

# Thank You

All Cosmos Bio-Tech Holding Corporation 全宇生技控股有限公司