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TEKNOLOGI  
MARA



**FACULTY OF PLANTATION AND AGRO-TECHNOLOGY**

**DIPLOMA IN PLANTING INDUSTRY MANAGEMENT (DPIM)**

**UNIVERSITI TEKNOLOGI MARA SARAWAK**

**FINAL REPORT OF INDUSTRIAL TRAINING**

**SOLID PALM OIL MILL BHD**

**FPA 310**

**15 JULY 2019 – 30 AUGUST 2019**

|            |                    |
|------------|--------------------|
| NAME       | CYNTHIA LAHUNG JAU |
| STUDENT ID | 2017671866         |
| IC NUMBER  | 991209-13-5708     |

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Solid Palm Oil Mill Bhd is located at 101km, Jalan Miri-Bintulu, Coastal Road Miri, 98000 Sarawak. It also has an estate plantation at Bario. This company had started to operate in oil palm plantation industry with incorporated on 17 of February 2009. The company indicates a net sales revenue of 13.15% that increased during on their latest financial report. However, their total asset has decreased by 7.65 % at the same period and the net profit margin of the company had increased by 0.92% in 2017.



Solid Palm Oil Mill BHD office

## NURSERY

I had my visit at Asam Bumi SDN BHD during my industrial practical after getting permission from my supervisor. Asam Bumi SDN BHD is located at Lot 656, Block 31, Kemena Land District, 97008 Bintulu Sarawak. My supervisor for the nursery was Encik Malvin Ugap and Encik Joshua Jemput. They conducted oil palm nursery that use single stage nursery. Their nursery area is about 6 hectare. They have pre-nursery area and main nursery area too. They have sufficient water sources from nearby stream. It is very important to have sufficient source of water supply to ensure good quality of oil palm seedling.

There are many procedure to conduct a successful nursery that produce high quality of seedling. To start a nursery, we need to send registration form of the nursery to Department of Agriculture (DOE) to get approval and legal license to operate the nursery. The procedure to conduct nursery are ordering and handling germinated oil palm seed, nursery site, watering system, pre-nursery and main nursery.

### ORDERING AND HANDLING GERMINATED OIL PALM SEEDLING

**PERMITIHAN PERATUBAHAN**  
**LEMBAGA BINTULU SARAWAK (P) BERSEKUTUAN BERHAD**  
 (Majlis Perancang Pertanian Sarawak) (Majlis Sarawak Pertanian) (Sarawak Council of Agriculture) (Majlis Sarawak Pertanian) (Sarawak Council of Agriculture)  
**ASAM BUMI SDN BHD (NO. PENDAFTARAN: 162288-V)**  
 LOT 656, BLOK 31, KEMENA LAND DISTRICT, 97008 BINTULU, SARAWAK

No. Aduan Semula: **ES2014/1010 Sarawak**

1. Merga/kuilaka: **SL0801-B**

2. Merga/kuilaka: **SL0801-B**

3. Merga/kuilaka: **SL0801-B**

Agai tempoh: **Satu (1) tahun** bermula dari **01/08/2015** hingga **31/07/2016**

NO.14, SELURU-LAPOK ROAD, SUNGAI SENGKAWANG, SEREM, SIBKITI  
 96100 SERI  
 SINGAPURA

D. Ahmad Farveez H. Ghulam Kadir  
 Timbalan Ketua Pengarah (PABD)  
 by Ketua Pengarah  
 Lembaga Melayu Sarawak Malaysia

| No. | Melayu Melayu Sarawak | Signature                      | Kelulusan/Kelulusan Sarawak    | Signature |
|-----|-----------------------|--------------------------------|--------------------------------|-----------|
| 1   | PK                    | Ahmad Farveez H. Ghulam Kadir  | Timbalan Ketua Pengarah (PABD) | SLG/BU    |
| 2   | PK                    | Timbalan Ketua Pengarah (PABD) | Timbalan Ketua Pengarah (PABD) | PK/PT     |
| 3   | PK                    | Timbalan Ketua Pengarah (PABD) | Timbalan Ketua Pengarah (PABD) | PK/PT     |
| 4   | PK                    | Timbalan Ketua Pengarah (PABD) | Timbalan Ketua Pengarah (PABD) | PK/PT     |
| 5   | PK                    | Timbalan Ketua Pengarah (PABD) | Timbalan Ketua Pengarah (PABD) | PK/PT     |
| 6   | PK                    | Timbalan Ketua Pengarah (PABD) | Timbalan Ketua Pengarah (PABD) | PK/PT     |
| 7   | PK                    | Timbalan Ketua Pengarah (PABD) | Timbalan Ketua Pengarah (PABD) | PK/PT     |
| 8   | PK                    | Timbalan Ketua Pengarah (PABD) | Timbalan Ketua Pengarah (PABD) | PK/PT     |
| 9   | PK                    | Timbalan Ketua Pengarah (PABD) | Timbalan Ketua Pengarah (PABD) | PK/PT     |
| 10  | PK                    | Timbalan Ketua Pengarah (PABD) | Timbalan Ketua Pengarah (PABD) | PK/PT     |

The picture above is the company legal permit to open nursery business that can order germinated oil palm

**DEPARTMENT OF AGRICULTURE, SARAWAK, MALAYSIA**  
**PLANT QUARANTINE DIVISION**  
**PERMIT TO IMPORT PLANTS**

Name of consignee: **Asam Bumi Sdn Bhd**  
 and address: **Lot 656, Block 31, Kemena Land District, 97008 Bintulu, Sarawak**

Name of consignee: **Field Agricultural Services Sdn Bhd**  
 and address: **Level 14, Menara Pesta Platinum Park, No 11, Persiaran KLCC, 50088 Kuala Lumpur**

Permission is hereby granted to the consignee to import the plants (s) contained in the Schedule hereto through (appointed entry-point) **Bintulu Airport**

This permit is issued subject to the following conditions:  
 (1) Plants must be accompanied with a Phytohealth Certificate from the country of origin of the plants issued within 72 hours prior to departure for the consignee.  
 (2) A copy of this Import Permit must be sent to the consignee and must accompany the consignment.  
 (3) Plants must be free from soil and pest.  
 (4) Plants be subject to inspection or quarantine prior to clearance from the Quarantine Officer.  
 (5) This Import Permit is valid for one consignment only until stated.

**Further Conditions:**  
**TREATMENT:** Quarantined plants are to be dipped in 0.5% Triclorfon or Chloroxone and 0.5% Sodium Hypochlorite.  
**DECLARATION:** 1. The consignee must declare the Additional Declaration of the PC.  
 2. The consignee must declare the Additional Declaration of the PC.  
**Additional Declaration:** (a) The plants are free from soil and pest.  
 (b) The plants are free from soil and pest.  
 (c) The plants are free from soil and pest.  
 (d) The plants are free from soil and pest.  
 (e) The plants are free from soil and pest.  
 (f) The plants are free from soil and pest.  
 (g) The plants are free from soil and pest.  
 (h) The plants are free from soil and pest.  
 (i) The plants are free from soil and pest.  
 (j) The plants are free from soil and pest.  
 (k) The plants are free from soil and pest.  
 (l) The plants are free from soil and pest.  
 (m) The plants are free from soil and pest.  
 (n) The plants are free from soil and pest.  
 (o) The plants are free from soil and pest.  
 (p) The plants are free from soil and pest.  
 (q) The plants are free from soil and pest.  
 (r) The plants are free from soil and pest.  
 (s) The plants are free from soil and pest.  
 (t) The plants are free from soil and pest.  
 (u) The plants are free from soil and pest.  
 (v) The plants are free from soil and pest.  
 (w) The plants are free from soil and pest.  
 (x) The plants are free from soil and pest.  
 (y) The plants are free from soil and pest.  
 (z) The plants are free from soil and pest.

| Schedule | Description  | Quantity     | Country of Origin |
|----------|--|--------------|-------------------|
|          | Germinated Oil Palm Seeds ( <i>Elaeis guineensis</i> ) | 10,000 Seeds | W. Malaysia       |

Date of issue: **04.01.2018**

Receipt No: **66409054**

Original signed by: **PADDY JUDY**  
 Director of Agriculture, Sarawak, Malaysia

The picture above is the permit to order germinated oil palm seed. It is advisable to order the germinated seeds 1-2 years earlier.

## NURSERY SITE PLANING

### **CRITERIA FOR SITE SELECTION**

To choose a good site selection it is important to have better supervision, security, maintenance and to minimize the cost of nursery establishment. It will ease the worker to plant the germinated oil palm seed from any unwanted problem to happen. The company will have minimum issues that they need to find the solution.

The criteria that need to have for a good nursery site:

1. Proximity to have good and unpolluted water source such as rivers, streams
2. Free from flash flood.
3. Flat or slightly undulating areas with good soils in the vicinity.
4. If possible, the nursery should be near to the proposed replanting areas to reduce transportation cost.
5. The area should be well drained.
6. Free from major pests such as wild boar, porcupines, elephant and many more.

### LAND PREPARATION FOR NURSERY

#### **SITE CLEARING**

The selected site should be cleared and leveled at least 2 months before the arrival of the seeds. This method is used to allow the aeration of the soil and to regulate the nutrient inside the soil. The woody growth and noxious weeds should be fully eradicated so that the nursery is free from weeds. This practice help the company with minimizing the future usage of herbicides and wastage of budget in maintaining the nursery area.

#### **ROAD AND DRAINAGE SYSTEM**

A good nursery layout should have systematic drainage, road and irrigation systems. Proper planning is important to nursery establishment that will prevent any inconveniences after planting. When on rainy season, the drains should be dug out to throw away the unwanted plant or washed soil that flushed away and discharge the excess water to avoid flash flood to happen. The excess water should be channeled back to the waterways and lastly to the catchment pond.

The road layout should be in line with the polybag arrangement and drainage pattern. It is advisable to have straight roads that enable systematic arrangement of nursery of the seedling and to accommodate the proposed drainage system. The road system should be accessible in all type of weather condition that common in the area such as rainy day and sunny day. It is to facilitate the supervision, transportation of materials and eventual dispatch of the seedlings to the field.

Last but not least, it is advisable to have conservative terraces for rolling or undulating areas. It helps to reduce the surface runoff of water and erosion. Water runoff will cause seedling become unstable and toppled by strong wind. It also help to ease the worker work to do supervision and do maintenance activity.