FACULTY OF PLANTATION AND AGROTECHNOLOGY

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UNIVERSITI TEKNOLOGI MARA

SARAWAK

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SEMAI MEKAR SDN BHD

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INTRODUCTION TO SEMAI MEKAR SDN. BHD PLANTATION

Semai Mekar was established on June 2008. Before, it known as Tabung Haji Plantation, after Tamaco Plantation (Sabah) take over, Tabung Haji Plantation was changed to Semai Mekar. Semai Mekar has 2 estates which is Semilajau Estate and Sebauh Estate. Semai Mekar is a subsidiary company of Tamaco Plantation Sdn. Bhd which is an enterprise in Malaysia, with the main office in Lahad Datu. It operates in the Oil Palm Tree Farming industry.

BRIEF HISTORY OF OIL PALM

Oil palm tree, scientific name is Elaeis guineensis jacq. originated from West Africa where it grows in the wild and later was developed into an agricultural crop. It was introduced to Malaysia by the British in 1870 as an ornamental plant. First commercial planting took place in Selangor in 1917, it starts growing the oil palm plantations and the palm oil industry in Malaysia.

Since 1960, planted area had increased at a rapid pace. In 1985, 1.5 million hectares were planted with palm tree, and it had increased to 4.3 million hectares in 2007. It has become the most important commodity crop in Malaysia. As of 2011, the total planted area was 4.917 million hectares.

Mature palms growing up to 20 meter tall. The leaves are pinnate and reach 3-5 m long. A young palm produces about 30 leaves a year. Established palms over 10 years produce about 20 leaves a year. The flowers are produced in dense clusters, each individual flower is small, with three sepals and three petals.

The palm fruit takes 5–6 months to mature from pollination to maturity. It is reddish in colour, with the size of a large plum which each fruitlet is almost spherical or elongated in shape and grows in large bunches. Each fruit is made up of an oily, fleshy outer layer known as the pericarp, with a single seed known as the palm kernel which also rich in oil. Each bunch of fruit weighs between 5 and 30 kg depending on the age of the palm tree.

WEEDING OPERATION: SELECTIVE SPRAYING

On the first week, we went for selective spraying which was located at block 21 which is 66.96 acre.

Selective herbicides control specific weed species, while leaving the desired crop relatively unharmed, while non-selective herbicides , it is also called as total weedkillers in commercial products can be used to clear waste ground, industrial and construction sites, railways and railway embankments as they kill all plant material with which they come into contact.

Chemical used are garlon, canyon, wet and stick. Garlon functions are minimizes soil erosion, suppresses other noxious weeds, minimizes run-off and conserves soil moisture natural mulching. Canyon that contains Metsulfuron-methyl is an organic compound classified as a sulfonylurea herbicide, which kills broadleaf weeds and some annual grasses. It is a systemic compound with foliar and soil activity, that inhibits cell division in shoots and roots. Wet and stick 747 is a wet and sticky agent which ionless. It helps in improving the act of absorbtion, non-toxic and not harmful towards plants.

Dosage used for the mixture of chemical is 4 tins of chemical mixture with 10 liter of water.

Targeted plants for selective spraying are clidemia hirta, asystasia intrusa and volunteer oil palm.

Based on the workers, the targeted plants are expected to die in 1 week which is the effect of the weedicide towards targeted plants.

1 knapsack sprayer which is 16 liter can cover about 12 trees but if the area is too crowded with weeds, it can only cover up to 8 trees.

The price of garlon is RM29/liter, canyon is RM18/liter and wet and stick is RM3.75/liter