

## **Palm oil quality monitoring in the ripening process of fresh fruit bunches.**

### **ABSTRACT**

This research is done on oil palm (*Elaeis guineensis*) Tenera variety (A cross between Dura and Pisifera) on 8-year-old palms planted in 2003 at the Malaysian Palm Oil Board (MPOB) Research Station to aim of palm oil quality monitoring during the ripening process of fresh fruit bunches. The maturity and palm oil development in the fruit ripening process is a good way to harvest time monitoring and recommendation to evaluate the palm oil performance in food industries. Fresh Fruit Bunches were harvested from designated palms (January till May of 2010) and were divided into three regions (Top, Middle and Bottom) where fruits from the outer and inner layers were removed randomly during the ripening process between 8, 12, 16 and 20 weeks after anthesis (WAA) to evaluate of oil development in mesocarp and kernel also investigate of fatty acid changes during the ripening process at each three regions of bunch by Gas Chromatography. Calculation of earned data related to ripening time and oil content was done by MSTAT-C and Microsoft Excel computer programs.

**Keyword:** Palm Oil; FFB; Oil monitoring; Fatty Acids.