



## **NEWSFLASH :** Pre-mill oil content estimation to improve production and mill accountability

December 10, 2013. Penang, Malaysia – With palm oil extraction rates declining in Malaysia since the 1980s and more recently, in Indonesia, a renewed evaluation process in mills is urgently needed.

The Southeast Asia Program of the International Plant Nutrition Institute (IPNI SEAP) modified a bunch analysis (BA) method to allow assessment of pre-mill oil content of fresh oil palm fruit bunches (FFB) in commercial-scale harvesting.

This BA method was used to estimate oil content of harvested FFB from three IPNI SEAP best management practice project sites in Indonesia. The estimated oil content obtained from the modified BA provides a gauge on the maximum amount of oil that a palm oil mill can produce from harvested FFB. Oil palm growers can therefore estimate the efficiency of oil recovery in the field, and in palm oil mills.

When FFB from various sources arrive at a mill, they are all processed together and assigned a common oil extraction rate regardless of the variations among batches of FFB harvested in different sites. Growers are thus paid using criteria which do not take into account the potential oil content in each batch of FFB.

The proposed pre-mill estimation of oil content in harvested FFB provides a more realistic valuation of FFB, which will also enable mills to track their process performance, and ultimately remunerate growers based on the potential oil content of their crops.

By assigning estimated oil extraction rates to FFB prior to milling, palm oil mills stand to be more profitable, by offering competitive payments to growers according to oil content, which in turn should motivate growers to improve the oil content of their crops.

The modified BA provides a comprehensive approach, from the field to the mill, to measure crop performance. These results can be used as a feedback mechanism to improve field and mill oil recovery efficiency, thereby fostering collaboration between plantation staff, while increasing profitability.

The IPNI SEAP modified BA method can be replicated in any estate, even those with basic facilities. BA teams can be formed and trained easily.

*This method was presented at the Malaysian Palm Oil Board's International Palm Oil Congress, 19–22 November 2013 (PIPOC 2013), Kuala Lumpur, Malaysia.*

*For more information, please see the poster at <http://seap.ipni.net/article/SEAP-3093>*

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### **About IPNI**

The International Plant Nutrition Institute (IPNI) is a not-for-profit, science-based organization dedicated to the responsible management of plant nutrition for the benefit of people. Through cooperation and partnerships with respected institutions around the world, IPNI adds its strength to agronomic research, education, demonstrations, training, and other endeavors. Best management practices for nutrient stewardship encourage the concept of 4Rs - applying the right nutrient source, at the right rate, at the right time, and in the right place. To learn more about IPNI, please visit: [www.ipni.net](http://www.ipni.net)

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