

The Oil Palm Agronomy Centre (OPAC) aims to help oil palm growers in obtaining the optimum economic fresh fruit bunch (FFB) yields through practicing the good agricultural practices (GAP) and applying appropriate balanced fertilisers. Hence, OPAC will systematically provide services on agronomic practices and proper fertilisation recommendations based on the foliar, soil and fertiliser analyses. OPAC also offers trainings and seminars on the proper application of balanced fertilisers. Human capital development programmes are also conducted to develop highly skilled officers.

In Malaysia, more than 40% of the area under oil palm is owned by smallholders or private estate with low productivity due to inadequate fertiliser application and lack of expertise in agronomy. Financial deficiencies also prevents them from having soil and foliar analyses in order to get a comprehensive fertiliser recommendation from agronomists.

A survey was carried out to gauge the current services of foliar and soil analysis offered by the commercial laboratories in Malaysia (Table 1). The survey indicated that OPAC would be a complete centre that filled the gaps for services required by the industry, including sampling, analyses, field visit, fertiliser recommendation and advisories to improve oil palm productivity.

Therefore, OPAC's main aim is to improve the skills of the smallholders in oil palm agronomy management by practising the GAP in order to obtain the optimum economics FFB yield. Fertiliser recommendation will be provided after soil and plant analyses. Hence, they will be able to produce palm oil sustainably in according to MSPO requirement (MS2530-3, 2018).

OPAC SERVICES

Services offered are:

- Soil and foliar sampling.
- Chemical analyses for plant, soil and fertiliser samples.
- Agronomy advisory visit.
- Systematic fertilisation recommendations.

The cost includes all services and varies depending on the plantation hectarage (Table 2).

METHODOLOGY

The implementation procedures of OPAC are as follows:

- Identify the plantation having low yield.
- Gather specific information on soil, regional climate and site yield potential (SYP) (Figure 1).
- Conduct foliar and soil sampling (Figure 2).
- Foliar and soil laboratory analyses (Figure 3).
- Produce a comprehensive report and measures to be implemented for improving oil palm yield.
- Provide the fertiliser recommendations based on the soil and foliar analyses.
- Organise seminars/awareness in practising the GAP to increase yield.

BENEFITS

OPAC will assist planters to increase FFB yield based on the fertiliser recommendation specific to site yield potential (SYP), improve their skills in oil palm agronomy management sustainably in accordance to MSPO's requirements, thereby increasing their profits.

TABLE 1. COMPARISON BETWEEN OPAC AND 14 OTHER COMMERCIAL LABORATORIES

Laboratory/ Services	Soil analyses	Plant analyses	Fertiliser analyses	Field sampling	Agronomy Visit	Special expertise-GIS	Oil palm expertise
Lab OPAC	√	√	√	√	√	√	√
Lab A	√	√	√	X	X	X	√
Lab B	√	√	√	X	√	X	√
Lab C	√	√	√	√	√	X	√
Lab D	√	√	√	X	√	√	√
Lab E	√	√	√	X	X	X	√
Lab F	√	√	√	X	√	X	√
Lab G	√	√	√	X	X	X	X
Lab H	√	√	√	X	X	X	X
Lab I	√	X	√	X	X	X	X
Lab J	√	X	X	X	X	X	X
Lab K	√	X	X	X	X	X	X
Lab L	X	X	√	X	X	X	X
Lab M	X	X	√	X	X	X	X
Lab N	√	√	√	X	X	X	X

Note: √ - available and X – not available.

TABLE 2. THE ESTIMATED COST INCLUDES ALL SERVICES OFFERED AND VARIES DEPENDING ON PLANTATION AREA

	Services	Price (RM)/Sample
Chemical analysis	Foliar	200
	Soil	350
	Fertiliser and compost	50
Physical analysis	Moisture characteristics	20
	Texture	20
	Particle density	10
	Bulk density and porosity	5
	Moisture content	5
Agronomic advisory services	Sampling, analysis and fertiliser recommendation	2000 per 30 ha* (*minimum charge)

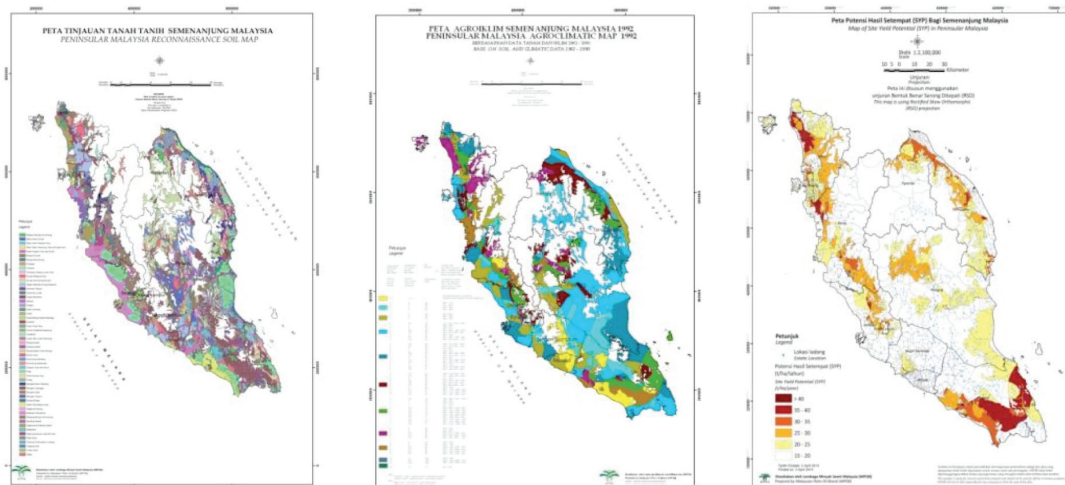


Figure 1. Maps and information.



Figure 2. Foliar and soil sampling.



Figure 3. Laboratory analyses.

REFERENCE

MS2530 (2018). Means of assessing compliance, part 3: General principles for oil palm plantations and organized smallholders, MPOCC.

For more information, kindly contact:

Head of Corporate Implementation
and Consultancy Unit, MPOB
6, Persiaran Institusi,
Bandar Baru Bangi,
43000 Kajang, Selangor, Malaysia
Tel: 03-8769 4574
Fax: 03-8926 1337
E-mail: tot@mpob.gov.my
www.mpob.gov.my