

BY-PRODUCT

Lynas plant waste residue can be used to boost oil palm growth

PEOPLE living near the Lynas plant in Gebeng, Pahang, are divided between believing the myth propagated by opponents, proponents and the reality of the issue.

Lynas was built to produce rare earth, which is needed in high-end industries, and is not a nuclear reactor.

I spent time conducting research on a by-product of Lynas' chemical plant for agriculture (oil palm), which is the non-radioactive neutralisation underflow

(NUF) residue, or magnesium-rich synthetic gypsum.

The production of rare earth involved many steps.

Along the way, two contrasting by-products are produced.

The process starts with lanthanide ore containing rare earth coming from Mount Weld, Australia,

After a series of chemical processes, radioactive water leach purification (WLP) residue is produced. This is followed by NUF residue production.

A team of researchers from Universiti Putra Malaysia (UPM) and Universiti Kebangsaan Malaysia, led by myself, has evaluated the benefit of applying NUF on land with oil palm.

We found that NUF contained high amounts of macronutrients.

The application of the by-product has a positive impact on oil palm in terms of growth and production.

In a glasshouse study conducted at UPM in Serdang, the NUF application was found to have re-

duced soil acidity, resulting in oil palm seedlings having better growth.

This study concluded that NUF not only was a good fertiliser, but also an excellent soil amendment.

The same thing can be done with the WLP produced by Lynas, but it has to be done with caution to ensure the sustainability of the process.

Once done, the WLP can be turned into a by-product used in agriculture.

It has been reported that the WLP produced by Lynas can be used as fertilisers and help reduce the import of phosphate rocks.

This can be translated into foreign currency savings.

In the spirit of Malaysia Boleh, we can use the wastes produced by Lynas to boost the economy.

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