DOST-ITDI develops new biodiesel from rubber seed oil

In 1937, G. Chavanne of the University of Brussels in Belgium discovered how to produce biodiesel from palm oil using the process now called transesterification.

Since then, the world has been steadily "harvesting" - neither fruit nor vegetable produce - but oil from six of the best biofuel sources. These include sugar cane, palm oil, oilseed rape, wood, soybeans, and algae.

But while those may be the best sources of biofuel, their problem lies in their competing uses for food, domestic activities, traditional fuel, protein source, or feed meal.

In the Philippines, processors prefer to use sugarcane, molasses, and coconut oil for biodiesel production. But, with current prices of biodiesel at P52.50/li and regular diesel at P70-P80 per liter, ITDI is exploring other alternative sources of biodiesel to ride on the current price wave being pushed by the Russia-Ukraine friction.

Valerie Fay R. Ablang of the Chemicals and Energy Division at the Industrial Technology Development Institute (DOST-ITDI) is, thus tapping a different source of biodiesel.

Using rubber seeds, she worked to enhance quality of the fatty acids in rubber seed oil. The end product is a biodiesel that will meet prescribed local and international standards.

Further, she has submitted samples to test for FAME (Fatty Acid Methyl Ester). To secure sustainability of raw material source of rubber seed oil, ITDI has established partnership with local rubber seed farmers in Alaminos, Laguna province. (AMGuevarra\\ ITDI S&T Media Service)

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