



Unimas con... research on unique compost in Bintulu

by Elizabeth Serai James

KUCHING – Universiti Malaysia Sarawak (Unimas) is one step ahead in the field of research and development (R & D) with the making of a new type of compost.

“The compost, which we have converted from Shell MDS biosludge, is the first of its kind in the world,” claimed Professor Wan Sulaiman Wan Harun of Faculty Resource Science and Technology, Unimas yesterday.

The two-phase project, commissioned last November, is being conducted at Universiti Putra Malaysia (UPM) Bintulu Campus.

The first phase was completed in January this year while the second phase started in May. The project is scheduled to be completed by the middle of next year.

The project, undertaken by a group of Unimas lecturers led by Professor Wan Sulaiman, is studying the potential of converting the Shell MDS raw biosludge into a compost cum soil conditioner.

According to Sulaiman, the whole study has to undergo various processes including physical, chemical and microbiological analyses as well as basic toxicity tests on the vegetable seeds.

The study also involves vegetable farmers, fruit growers, horticulturists, owners of flower nurseries who have to evaluate the quality of the compost



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produced.

“So far, the result of the study has been quite positive. Although it has some toxic elements, they are well within the limit allowed under the international standards including the US Environmental Protection Agency (USEPA) and European Commission (EC) environmental standards,” Sulaiman told the *Tribune* when met at his office yesterday.

For the purpose of the study, about five to 10 tonnes raw biosludge from Shell MDS per day are used to produce about one to two tones of compost per day.

The project, he pointed out, would be beneficial because it would help to get rid of harmful waste (the biosludge) and eliminate the need for a dumping

ground.

The composting process takes about five to six weeks and so far, the researchers have been able to produce only two samples of the compost.

Sulaiman explained that the second phase involved studying the compost, and would include experiments done with the help of the students.

“We hope to come up with a quality compost and a quality soil conditioner that can be used for ornamental purposes and perhaps other high value crops,” he added.

The compost has not been officially named although there are suggestions.

“Of course, it’s not nice to name it biosludge. Biosludge is a waste that results from the processing of liquid into gas. Biosludge contains mainly water and soot (organic material) that is produced from the cooling tower,” Sulaiman said.

On the uniqueness of the new compost, Sulaiman pointed out that the Shell MDS plant was the only one of its kind in the world.

“The process which includes catalytic conversion is unique by itself. So, we expect the sludge produced will be different from other industrial and biological sludges,” he said, adding that a market study on the compost was being conducted.

He believed the compost would be marketable and that its biggest buyer would be the Bintulu Development Authority (BDA) because it was in charge of landscaping Bintulu town.