

# There's money in garbage!

## Turn organic waste and leftovers into compost, says associate professor

By Joseph Wong

**KUCHING:** Each day, Sarawakians throw out money amounting to millions of ringgit annually in the form of organic waste.

Not to mention that the waste products, if not managed properly, could lead to sanitation problems and pollution.

Associate professor Dr Kopli Bujang yesterday said composting is a possible sustainable development still very much neglected by the commercial sector and members of the public.

In fact, only a handful of landscape companies are only beginning to practise composting, he told *The Borneo Post*.

"There's no one in the State doing composting on a commercial level as yet," he said.

Kopli, who is also the organising chairman of the three-day 'Systematic Waste Management' seminar and workshop, said there were two main reasons as to why this was the case.

He pointed out that the first was law and enforcement, in that the relevant authorities must ensure that there were laws to ensure that recycling was carried out and enforcement to ensure that the laws were adhered to.

For the second reason, he said: "All you need is just one person to show that such projects works."



**KOPLI... says money can be made from organic waste**

"I know of one oil palm plantation in Semenanjung Malaysia that has started to produce compost from the waste products and leaves and leftovers of oil palm," he said.

He said it took the company about three to four months to make compost as most of the 'materials' to make compost were fibre and this took a longer time to break down.

"But if it is kitchen waste such as vegetable remains and fruit, plant clippings, even grass, it is faster," he said, adding that it would take about three to four weeks.

Kopli said it is relatively cheap to create compost.

"Basically you need land. And if

you do composting, there are two methods — Windrow method and forced aeration," he said.

With the first method, the compost must be turned once a week, allowing the temperature to rise to 40 to 50 degrees Celsius to destroy seeds of weeds, he said.

While in forced aeration, a steady temperature was created using a blower to force air through the compost to keep it aerated.

"It works on a timer. The fan blows for 15 seconds, switches off for 15 minutes and this is repeated," he said. On bacterial control, he said if the temperature were to rise to 50 or 60 degrees Celsius, it would kill most germs like salmonella and Enterobacteriaceae (E Coli).

Kopli pointed out that if the temperature was kept at 40 degrees Celsius for two hours, it was enough to kill salmonella.

"Compost makers could also resort to spiking, that is, allowing the temperature to shoot up to 70 to 80 degrees Celsius to kill bacteria," he said.

The idea is to rid of the microbes but retain the growth of fungi, he said, adding that fungi was needed to break down the vegetation into compost.

However, there was a downside, he said.

"The main problem of composting is smell, especially if you deal with sewage, if it becomes anaerobic, then you will get the smell," he said.

Arkid  
NEW  
101.28  
35  
2002

The Borneo Post Tuesday 17.9.02 p.4

P.KHIDMAT MAKLUMAT AKADEMIK  
UNIMAS  
1000240784