

MEDIA RELEASE



Friday November 18 2005

Environmental Biotechnology CRC Pty Limited
ACN 082 895 976

Super Composting for your Garbage

WA Biotechnologists are reducing municipal organic waste more efficiently than ever before

Large scale composting requires a large area and generally must be located a long way from collection points. In addition, methane – a greenhouse gas – is often lost to the atmosphere in the process. But no longer!

The Environmental Biotechnology CRC (EBCRC), together with Organic Resource Technologies (ORT) and Murdoch University, is using biotechnology in a \$1.3m project to enhance a process that can convert large amounts of organic waste to compost more efficiently than ever before.

“This system reduces landfill and the time needed to create compost, is energy efficient and does not smell,” said EBCRC researcher, Lee Walker, based at Murdoch University.

“The system allows methane to be collected and used to generate electricity to run the whole process, making it self-sufficient,” he said.

Advanced biotechnology is being applied to a patented process, called DiCOM[®], developed by ORT. The process operates within specially designed sealed tanks that allow control over all environmental factors, with each tank able to take the organic fraction from around 1000 tonnes of municipal solid waste every 3 weeks.

Tom Rudas from ORT explains that biotechnologists can make a big difference to composting processes, “advanced biotechnologies are allowing us to further investigate how the microorganisms involved in our composting process work.”

“This knowledge makes the process more efficient in terms of energy production and nutrient availability to produce superior compost,” he said.

Since the process is compact and lacks offensive odours, existing municipal sites can use this new technology to process the organic waste they receive and produce stable compost, consistent with Australian standards, suitable for agricultural and amenities use, all for around the same cost as current practices.

In the process, air is pumped into the tank for the first five days. The airflow into the tank is then stopped so different bacteria can work in an oxygen free environment for the next seven days.

Methane is produced during this stage and can be used to generate electricity. Air is pumped in again during the last seven days to produce garden-quality compost.

**Fact sheets and photos can be obtained from Michaela Lauren, phone: +61 2 9209 4970.
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