



Supporting Sustainable Farming

Beyond.Worms@y7mail.com www.beyondworms.com

PO Box 332, Gin Gin, QLD 4671 Tel. (07) 4157 6045 Mobile. 0447 065 524

A.B.N. 90 698 800 389

On Site Organic Vermi Digester

Standard Commercial Model

Vermicrobe International Pty Ltd is an Australian company formed to develop and market environmentally "Low Impact" best practice technologies and products. The company has available a range of 'On-site Waste Treatment Digesters' for use by organic waste producers.

The **On-Site Organic Vermi Digester** has been designed to provide continuous processing of organic waste materials using 'in situ' earthworm processing technology based on sound vermiculture principles. A significant reduction in the cost and volume of waste being removed from a premise can be made by recycling on-site, i.e. food preparation waste, cooked food waste, lawn clippings, and other green garden waste, combined with cardboard and paper wastes.

The **Organic Vermi Digester** has been engineered to provide the right earthworm process environment and flow to do just that – Recycle your organic waste onsite, trouble free. The **Organic Vermi Digester** is maintained at optimum operating efficiency via a solar powered, electronically controlled moisture reticulation system, capable of being adjusted to suit different climatic regions and situations.



Essential to the operation, the solar powered control system ensures the internal environment is maintained at an optimum level for the earthworms to accelerate the reduction of organic waste to organic plant food. Solar powered control of conditions reduces temperature variations resulting in optimum earthworm processing capabilities. The solar powered system is via a 5 watt solar panel that feeds into a 7 amp hour battery which controls the internal moisture levels of the unit.

This offers the pump ample battery redundancy, ensuring that the moisture control system can operate for up to 2 weeks in the case of poor weather conditions. The solar powered control system incorporates a regulator for battery protection.

Excess liquid released by food wastes as it is being processed by earthworms can be harvested regularly for use as an organic plant food, along with the solid worm castings produced by the system.

Access to the **Organic Vermi Digester** is via a hand-cranked lid. Ease of operation and full top opening provides for simple access when 'feeding' your wastes to the unit. The heart of the system is in its unique triangular design hidden within. Processed waste material (castings) falls from the sides of the triangular cage into the collection trays below. There is very little area that is more than 300mm from the atmosphere, which is a key design feature. This accelerates the conversion process.

Moisture is collected from the base of the triangular cage and returned back to the pump via a collection tray and filter, utilising the solar powered controller. The liquid can be pumped out for direct use on gardens and lawns via the onboard pump.

Fourteen large trays collect the earthworm castings and make for ease of handling when moving them to the garden. Worm castings makes excellent plant food, high in nutrients and essential soil microbes.



The unique **Vermi Digester** design has been recognised with a Design mark at the Australian Design Awards, and more recently the Digester received further acclaim by the peak environmental labelling association Environmental Choice Australia issuing an Environmental Choice Tick, demonstrating that the Digesters life cycle has a reduced carbon footprint when compared with other options in organic waste handling.

The **Organic Vermi Digester** can be expanded to meet the task at hand; economy of components can be achieved as the system is fully modular. Capacity of the unit can also be varied catering for seasonal variations in organic waste volumes.

The Digesters are supplied in kit form for cost effective shipping and transport. Assembly can then be performed on-site. Included in the kit is the working platform as shown in image below.

The **Organic Vermi Digester** is provided with comprehensive assembly instructions, full written instructions for operation of the digester along with a comprehensive troubleshooting guide, in addition to on-going support via phone and/or email.

The system is accompanied by a full 24-month warranty on structural components and workmanship providing peace of mind, with 12 months warranty coverage on electrical and plumbing system components.

Specifications

Footprint: 3.0m x 2.25m. Height: 1.8m. Solar panel: 5 watt. Battery: 7.0 amp hr. Pump: Rule submersible 800 lt/hr. Timer: 12v timer. Trays: 14 x 48lt. Processing capacity - Up to 350kg/week on mixed food/cardboard blends. Higher on manures.

