Aerobic Decomposition Makes Real Compost

Recycled organic waste is the raw material for TEMESI Compost. Organic waste can be decomposed:

1. Aerobically, which yields genuine compost like TEMESI Compost.
2. Anaerobically, which yields only inferior soil conditioners. Most products sold in Indonesia as organic compost actually are not organic and result from anaerobic decomposition and could not be called compost in the Western world.

Aerobic Decomposition

- Organic material is decomposed by aerobic microorganisms that need oxygen. This oxidation process results in compost, carbon dioxide and water.
- The decomposition is quick and odorless.
- The compost is free of pathogens, insect eggs or larvae and above all, free of weed seeds.

Anaerobic Decomposition

- Anaerobic microorganisms decompose organic material without oxygen. The oxygen-free process results in the strong greenhouse gas methane.
- The decomposition is slow and smells badly.
- The product can contains phytotoxins, pathogens, insect eggs or larvae and weed seeds.

- Temesi is one of the very few facilities in Indonesia that applies a genuine aerobic process with forced aeration. Blowers maintain aerobic conditions of at least 12% oxygen, which is measured daily.
- An ISO 9000 type Quality System assures high quality. The process is continuously monitored and the final products are analyzed in the on-site laboratory.
- Because aerobic decomposition avoids the strong greenhouse gas methane, the TEMESI facility receives Carbon Credits under the Clean Development Mechanisms (CDM) of the United Nation Framework Commission for Climate Change (UNFCCC).

Aerobic process by forced aeration:

Large blowers supply oxygen to 20,000 cubic meters of composting material to assure aerobic conditions.

During the active phase, 1 cubic meter of composting material requires 6 cubic meters of fresh air per hour.

Temperatures over 65 ºC during the composting process destroy all weed seeds, pathogens and insect eggs or larvae.