



Template for Evidence(s)

University	:	IFSULDEMINAS
Country	:	BRAZIL
Web Address	:	https://www.ifsuldeminas.edu.br/index.php

[3] Waste (WS)

[3.4] Organic Waste Treatment



1 - Campus Muzambinho - Poultry composting









3 - Campus Muzambinho - BIODIGESTOR AEROPIA THROUGH ANIMAL ORIGIN COMPOSITION



Campus Inconfidentes makes changes in the management of swine farming in the Fazenda-Escola Local Composting http://ifs.ifsuldeminas.edu.br/index.php/noticias/2324-mudanca-na-suinocultura





Description:

1 - The composter built in the Poultry Sector of the campus was scaled according to the with the following dimensions: 4 cells with a volume of $1m^3$, in the following dimensions: 2 x 2 x 2.

In composting, the carcasses are arranged in layers, plus manure goat / sheep (enrichment) with approximately 30 cm in height, each layer moistened in the sequence. The amount of water used to moisten each layer is 1,000 ml with daily frequency. In the compost the carcasses are arranged as follows:

- 2 kg dead carcasses;
- 6 kg of goat / sheep manure;
- Each layer receives the addition of 1000 ml of water daily;

After the cells are filled, they will be opened after 240 days, which is the time necessary for all animal material to be decomposed. This indicates the end of the composting is the drop in temperature, since it will not have more activity of the microorganisms.

Additional Information:

- Yield: 3 tons every 3 months.
- 6 months to fill each cell plus 8 for decomposition;
- Chickens = 90 to 150 birds per batch of 3,000 birds
- Poultry: thirty birds per month
- Broken eggs: 15 eggs per day.

2 -

The Composting Sector uses the maximum of plant residues and animal manure possible to produce its mass. Leaves that are collected in the roads and courtyards of the campus, straw resulting from lawn mowing, palm leaves and branches resulting from pruning, coffee husks, cattle manure, poultry manure, poultry litter, goat manure, manure from the biodigester of pig farms and others.

2015	216 m2	Used in the laboratories of Olericultura, Gardening, Nursery Forest Plants and Football Field.
2016	323 m2	Used in the laboratories of Olericultura, Gardening, Nursery Forest Plants, fruit growing and Annual Cultivation areas.
2017	217 m2	Used in the laboratories of Olericultura, Gardening, Nursery Forest Plants, fruit growing and Annual Cultivation areas.

* We inform that the year of 2017 still has mass of compound to be prepared, being able to surpass 2016.

3- Treatment used to give correct allocation to dead animals and childbirth residues.

These wastes provide nitrogen needed for the process. The process carbon is offered through the "bed", shaving floor, placed for the breeders and grasses and leaves.

Quantity produced per year = 6 Tonnes per year. Technical Responsible : Marcelo Antonio Morais





4 - The system adopted is called "System of Pig Breeding in Overlapping Beds". "A bedding is made, with substrate on the floor, usually waste from other activities is used. Here we tested the use of coffee processing bark, which gave a good result. A bed is made of it, which can reach up to sixty centimeters in height. They put the animals on this material, they urinate and defecate in that material, and the urine and faeces go through a process of fermentation and composting on the site