M^ySoil Mates

Organic Matter Decomposition Experiment

Group number:
Group name:
Students:

Concepts:

- Organic Matter: organic compounds that come from the remains of once-living organisms, such as plants and animals.
- Decomposition: Biological process carried out by soil organisms transforming organic matter into nutrients available for plants and animals.
- Biodegradable: material that can be decomposed by living organisms in a short period, thus transforming it into nutrients for other living beings.

Methodology:

- 1. Weigh and record the original weight of each material with decimals in grams (0.01 g).
- 2. Select an area of the yard where to bury the materials and note the characteristics of the ecosystem.
- 3. Dig a hole for each material with a trowel, place the materials. The materials will be buried to a depth of approximately 10 cm.
- 4. Label each material with an identification plate to remember in a few months where we buried them.
- 5. Cover each material with the excavated soil.
- 6. Record the date the materials were buried.
- 7. Wait at least 3 months, letting the soil fauna feed on our materials.
- 8. Dig up and weigh each material with decimals in grams (0.01 g), noting the weights and the difference in weights: Final weight Initial weight = Decomposed weight
- 9. Record the date on which the materials were unearthed.
- 10. Cover the holes and remove the plates. Do not leave garbage in the area.

Results:

Initial date: Final date: Ecosystem:

Material	Initial weight	Final weight	Decomposed	Observations
	(grams)	(grams)	weight (grams)	
1.				
2.				
3.				
4.				
5.				