

To better grow plants

To recycle

Why compost ?

To reduce waste

To favour biodiversity

Experiment 1

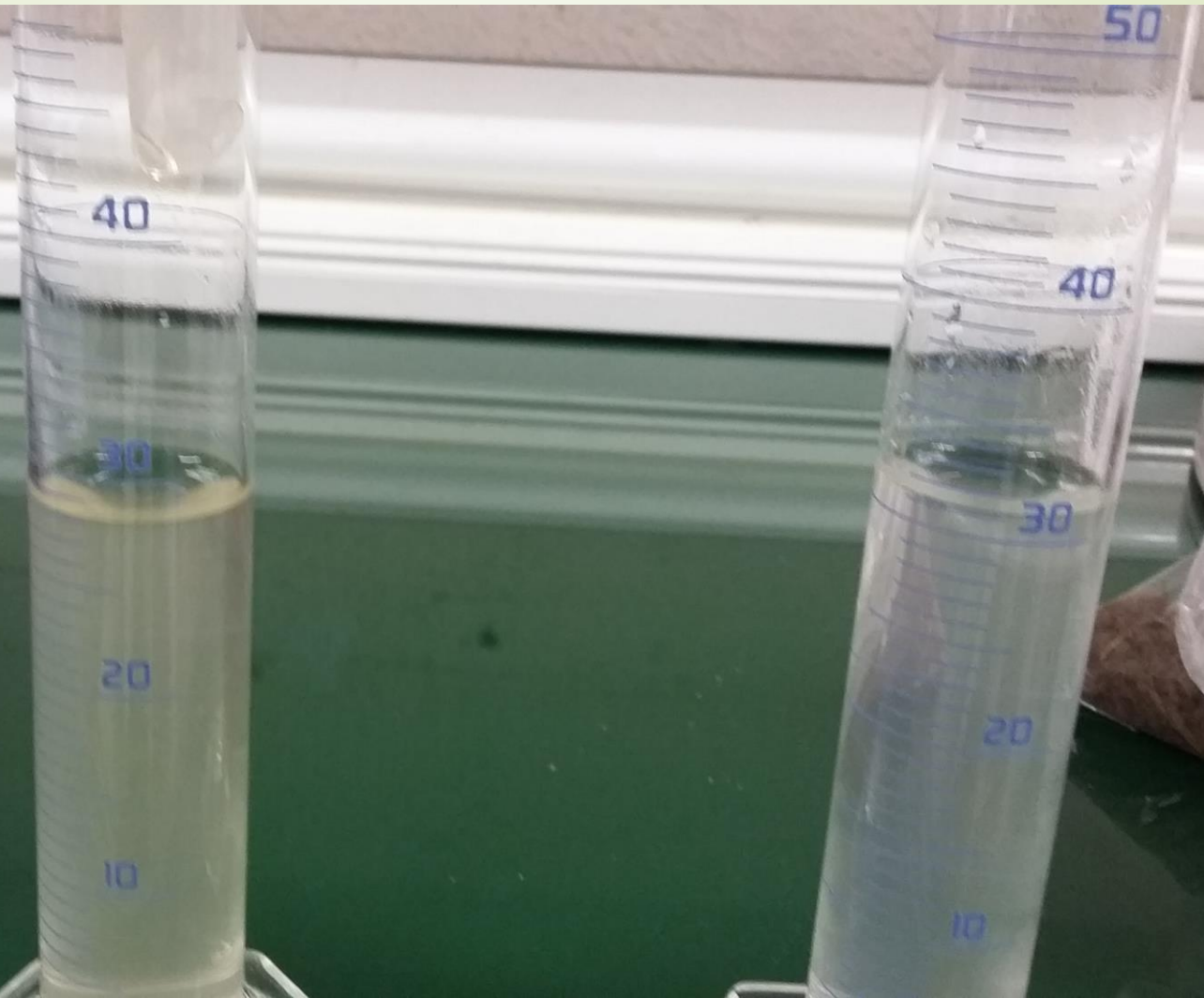
Soil enriched with
compost (30g)

Soil not enriched
with compost (30g)

50 ml of water

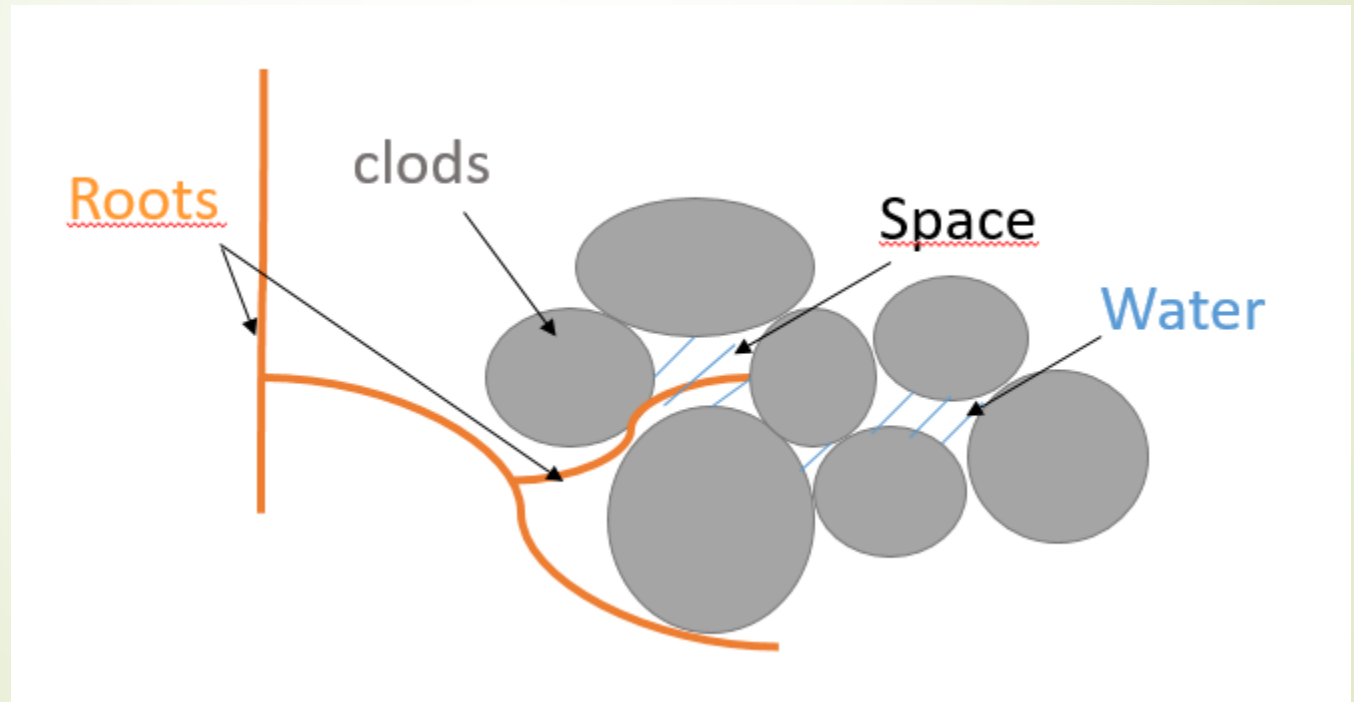


Results



More space and water for the roots in Soil enriched with compost

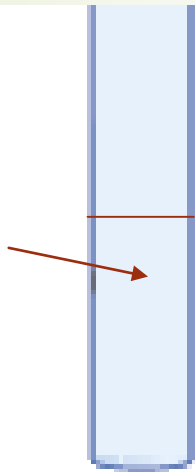
→ Compost is rich in organic matter which forms clods with clay. Spaces form in between the clods beneficial for roots 'growth and water storage.



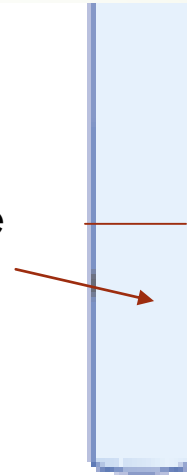
Experiment 2

10 drops of ammonium oxalate

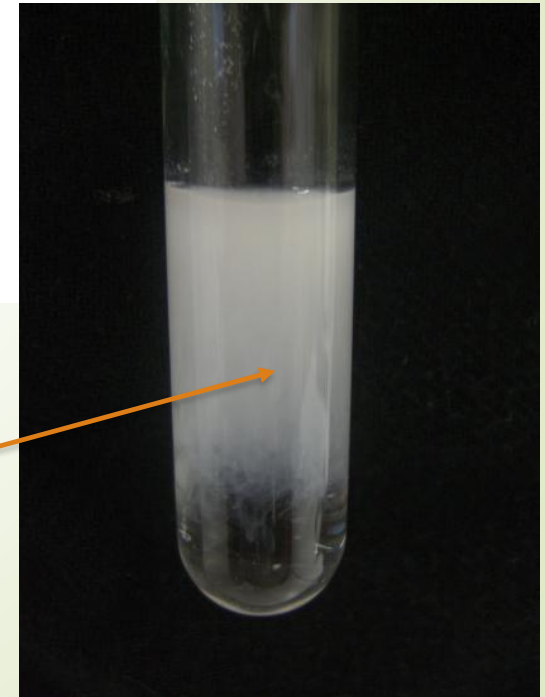
Soil filtrate enriched with compost



Soil filtrate not enriched with compost

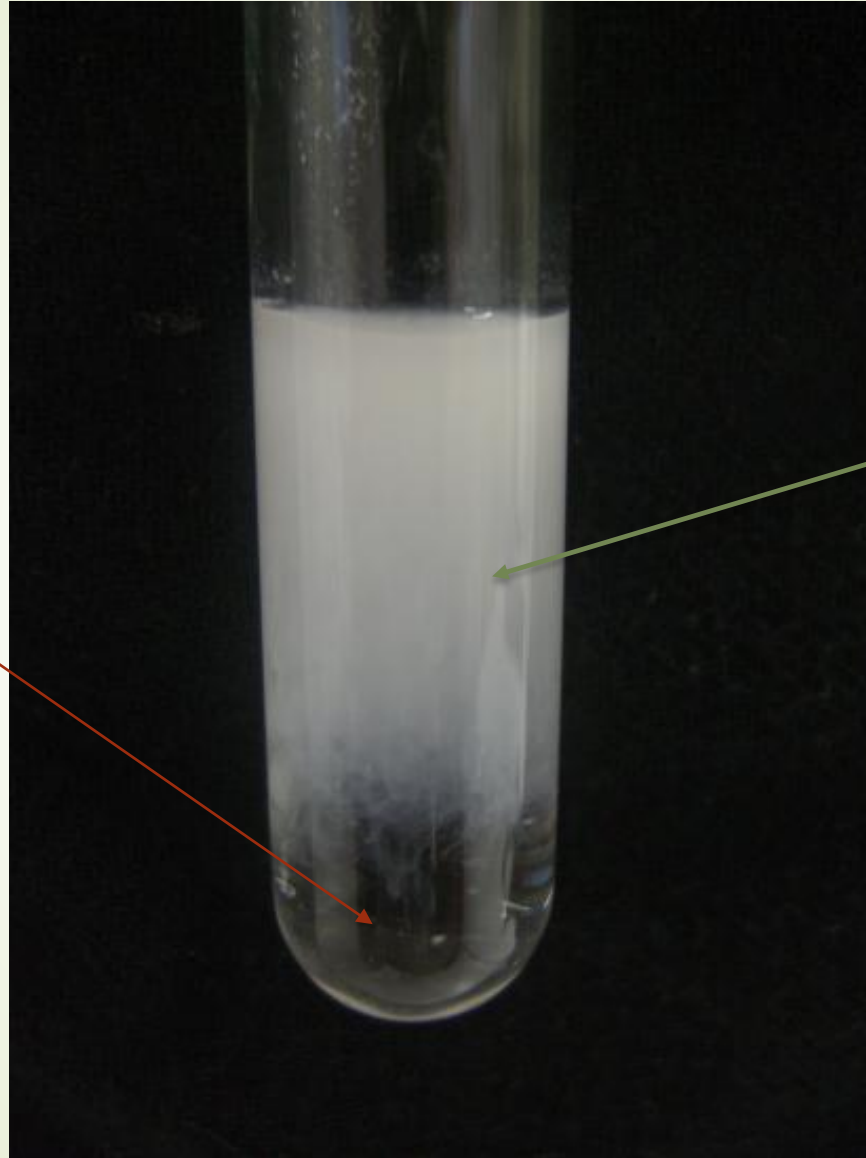


White precipitate = presence of calcium



Results

Filtrate
+ 10 drops of
ammonium
oxalate



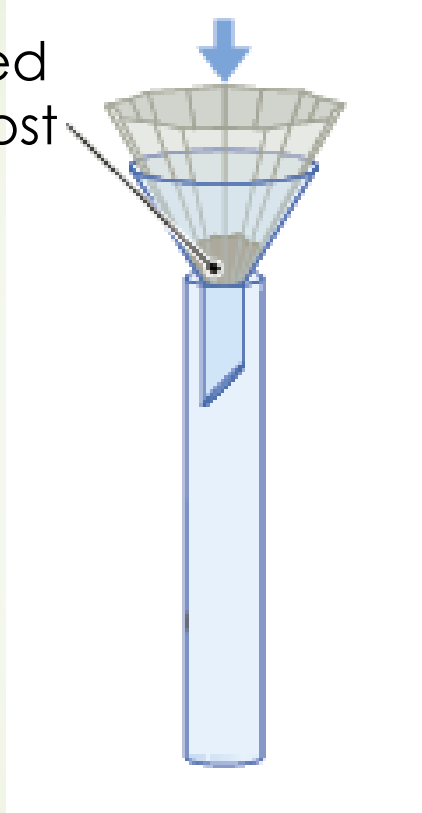
White
precipitate
showing the
presence of
calcium

Calcium for the plants

Experiment 3

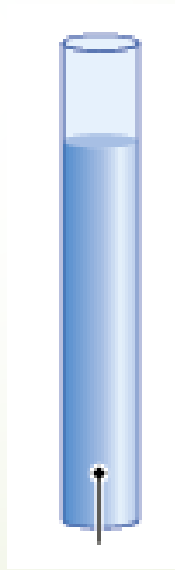
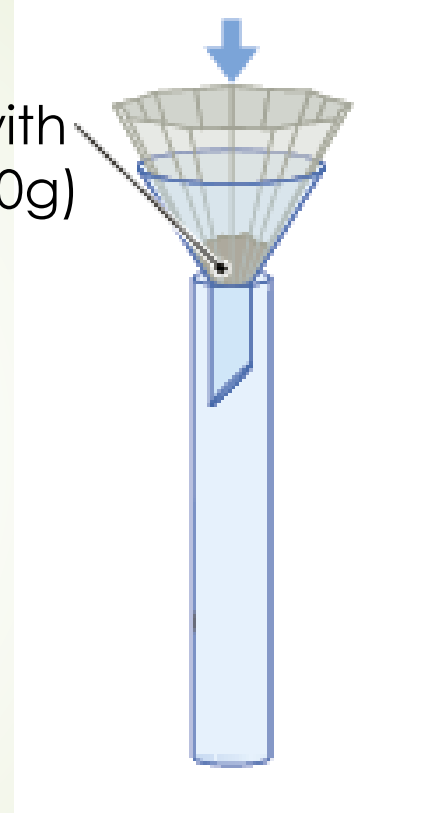
Methylene blue (10ml)

Soil enriched
with compost
(10g)



Methylene blue (10ml)

Soil not
enriched with
compost (10g)



Methylene blue is blue
thanks to a cation (+)

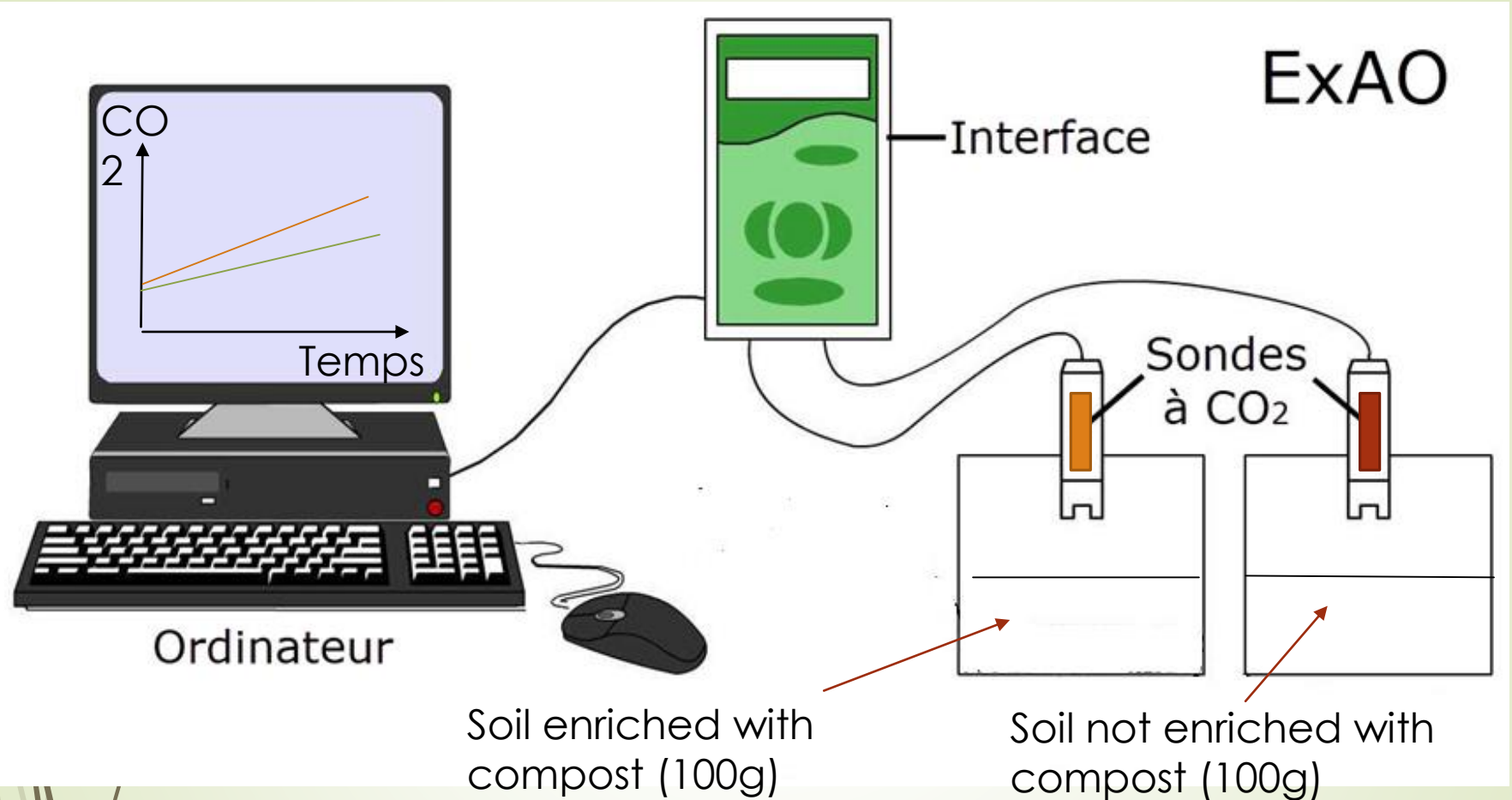
Results



Negative charges that will retain lots of other minerals

- Compost brings a lot of minerals useful for plants. These minerals come from the decomposition of organic matter.
- Complex made by compost with clay is negatively charged and retain cations (+) and so anions (-) which are not driven by water and remain available for the plants (Ca^{2+} , K^+ , NH_4^+ , Mg^{2+} , Fe^{2+} , H_2PO_4^- , SO_4^{2-})

Experiment 4



More *CO*₂ rejected by the soil enriched with compost so more life.

→ This *CO*₂ comes from animals' breath but also from the decomposition of organic matter (peelings, leaves...) by micro-organisms (mushrooms and bacteria). This life ventilates, mixes the soil and brings minerals.



Earthworms

Bacteria

mites

**More biodiversity
in the soil enriched with compost**

Mushrooms

Lithobias...

