

Are there any familiar things that
can promote the decomposition of
raw waste?



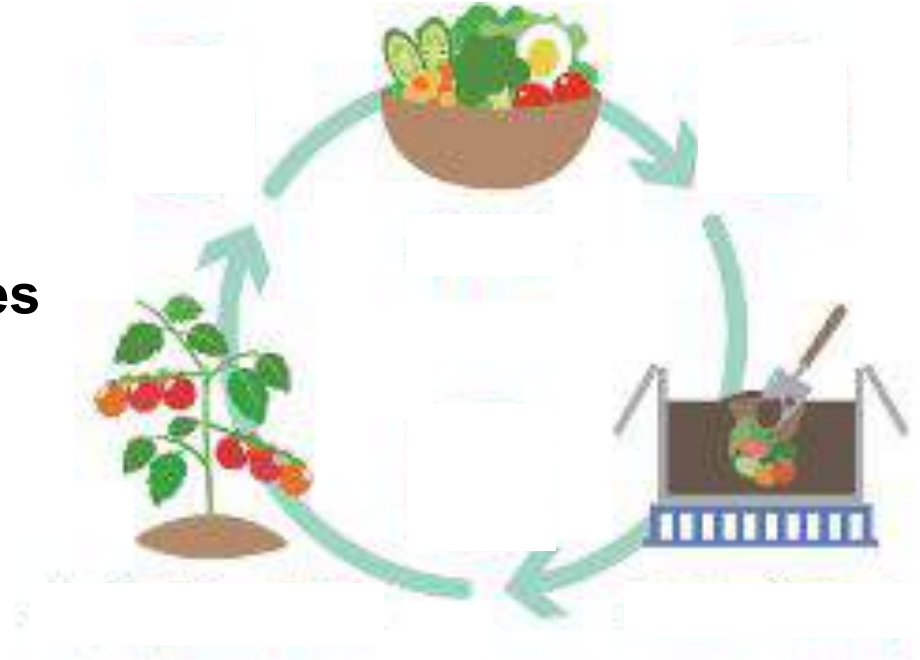
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- 4 Result
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1. Introduction

〈purpose〉

- **Effective use** of raw waste
- To spread "compost" **to homes**



Previous research conducted

「How can compost be changed by raw waste?」

◎Method
make composts



◎Result

The amount of nitrogen, phosphorus and potassium didn't change in all composts



Why did they not make a difference?

We found that rice bran was the cause!

Rice bran is very nutritious.



So, the composition of rice bran can have a great effect.



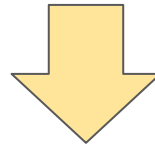
As a result, there are no difference.

We cannot use rice bran in this experiment.

Is there any things that can promote the decomposition of raw waste?



How can we make composts quickly and easily with things we have in house?



〈Research Question〉

Are there any familiar things that can promote the decomposition of raw waste?

2.Method

make compost

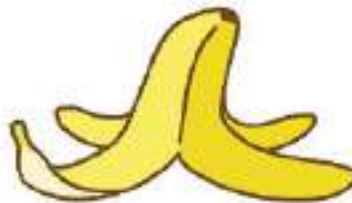


Check the change of size and shape
of banana's peel

〈Method〉

○What we used

- banana's peel 230g×5
 - leaf mold 500g×5
 - box made of foaming polystyrene 5boxes
 - yogurt water (yogurt5g and water500ml)
 - rice bran water (rice bran45gand water500ml)
 - natto water (natto45gand water500ml)
 - oil (10ml)
 - water (50ml)
- thermometer



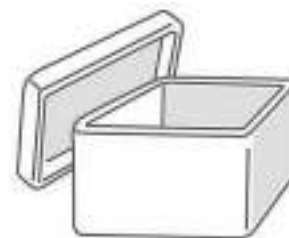
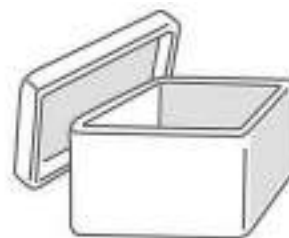
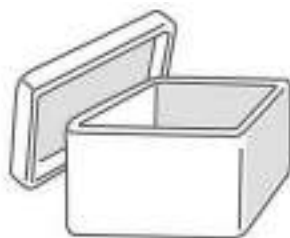
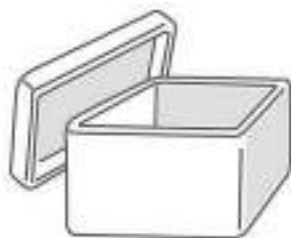
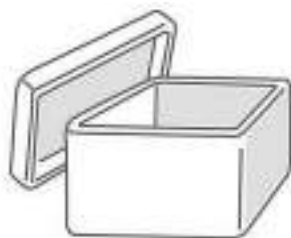
rice bran

oil

natto

yogurt

water



Inside the compost

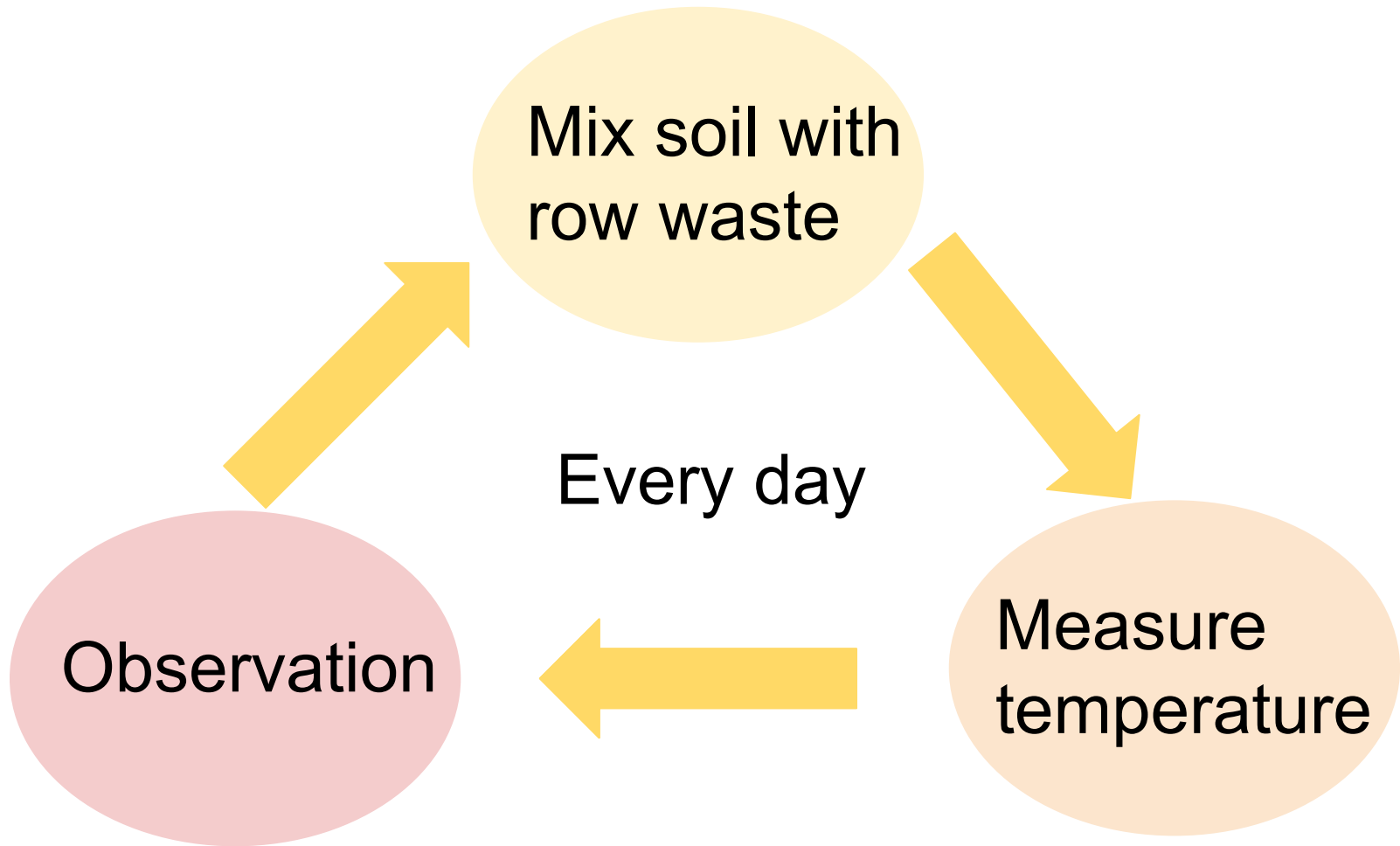
Leaf mold



Banana's peel



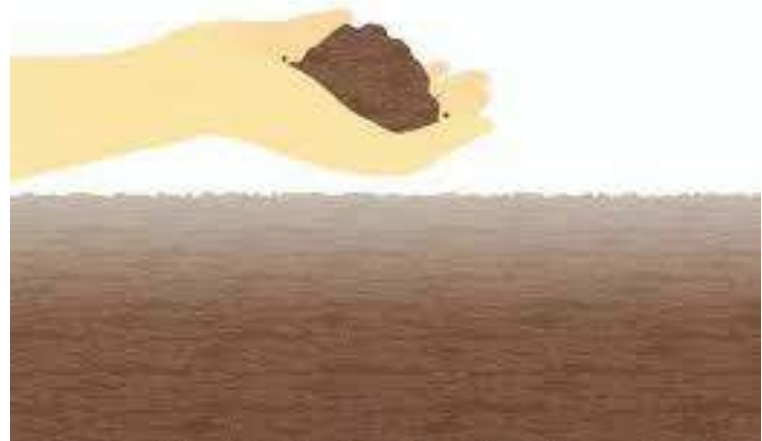
Put the
boxes in the
incubator





Take out
the soil

Observation



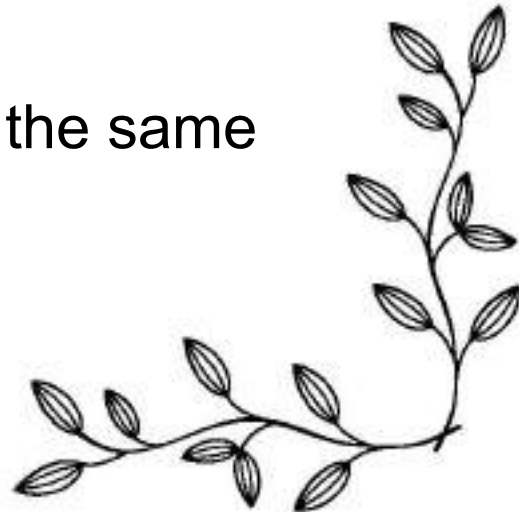
3.Hypothesis

oil...can decompose fastest

rice bran, yogurt, natto

...the speed of decomposition is about the same

water...can decompose slowest



4.Result

(rice bran)

after two weeks

earliest at decompose



(rice bran)

after four weeks



only bunch

decomposed smoothly

average temp 34.5°C

bark was decomposed completely

(yogurt and water)

after a week

soil didn't
dry easily

two weeks



(yogurt and water)
after four weeks

only bunch

emp 34.0°C

decomposition proceeded
most smoothly from the
first week to the second
week

softened quickly



(natto and water)

after a week



after two weeks

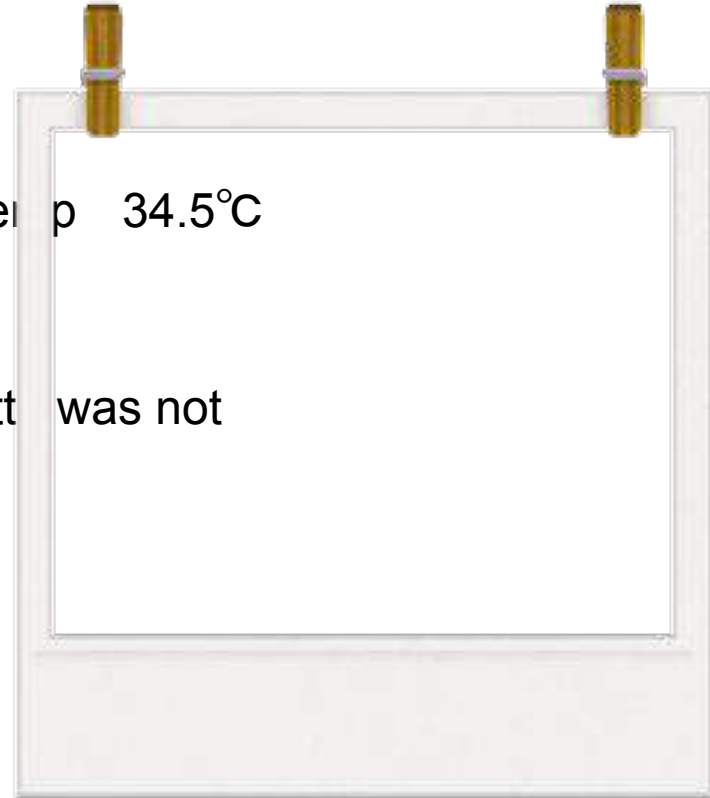


(natto and water)
after four weeks

only bunch

average temp 34.5°C

smell of natto was not



(water)

after a week



after two weeks



became small
and thin

(water)

after four weeks



became small
and fragile

temp 34.4°C

- the soil was dry

the barks became finer
and softer, but the shape
didn't completely
decompose

(oil)

after a week

tend to be dried



after two weeks

thin and soft



(oil)

after four weeks

was not
decomposed

tem

34.8°C

gross was seen on the
surface of the barks

- softened quickly



5 Consideration

〈Research Question〉

Are there any familiar things that can promote the decomposition of raw waste?



〈Answer〉

We can use yogurt and natto.

END

